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RETRO GAMER*

ISSUE ELEVEN

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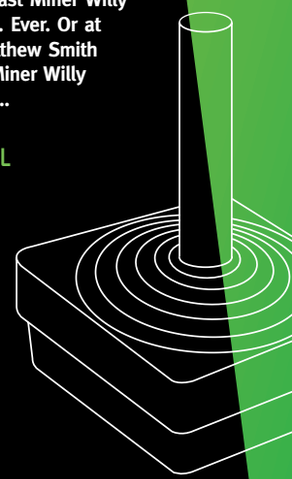
hello

Welcome to another issue of Retro Gamer magazine. As we write this it's the run-up to Christmas here and overcome by the generosity of the season we've gone out of our way to pack this issue with more retro gaming features than ever before. As always, let us know what you think about the current contents, either by emailing me or posting a comment on our Web forum – there will be a feedback thread on this issue up there right now.

The keen-eyed amongst you will have no doubt noticed that this issue contains yet another feature on Jet Set Willy. It seems that some people believe we have an unhealthy Matthew Smith/Miner Willy obsession. It's not like that really. Well, it is a bit, but it's not entirely planned. We covered Manic Miner and Jet Set Willy in the early issues, and it kind of snowballed from there, what with The Mega-tree disks turning up on eBay and Matthew Smith turning up at the Classic Gaming Expo. And then we wanted to leave it alone, but we were recently offered a fascinating article about the new mobile phone version and we really couldn't turn it down. So, this is it. The last Miner Willy article we ever run. Ever. Or at least it is until Matthew Smith finally completes Miner Willy Meets the Taxman...

MARTYN CARROLL
EDITOR



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RETRO NEWS

NEWS-OLA[RG]

More NES Classics

Zelda II and Metroid heading to GBA

Nintendo is to add four more top titles to its NES Classics range. From January 7th you'll be able to get Metroid, Dr. Mario, Castlevania and Zelda II: The Adventures of Link for around £15 each.

The original range of eight games launched back in July, along with a limited edition NES-styled GameBoy Advance to celebrate the console's 20th anniversary. While we're looking forward to the new releases, we're slightly envious that the Japanese range (known as Famicon Minis) has now grown to include 30 titles, compared to the 12 available in the UK and Europe. Granted, some of the Japanese releases are a little obscure, but we'd welcome the release of Ghosts 'n' Goblins, Dig Dug, Kid Icarus and especially Super Mario Bros 2 (as this would be the harder Japanese SMB sequel, released over here as Lost Levels in the SNES Mario All-stars pack).

Regardless, Metroid and Zelda II are must-buys, and the whole series is sure to worth something to collectors in a few year's time.

We Have a Winner!

Remake competition results announced

Just as we were wrapping up this issue, the guys at the Retro Remakes website revealed the winners of the Retro Remakes Competition 2004. First place went to Robert Lupinek's Legend of Shadow, a remake of Taito's rather obscure 1985 arcade game The Legend of Kage. The remake received an average score of 91.5% from the four judges, with Steve Phelps (aka The Toker) commenting: "This entry puts the nail in the coffin of those who believe it is not possible to produce an outstanding game in a click and play development system... this is done in Game Maker and oozes class from the second it opens to the very moment it closes." For his efforts Robert wins over £1,200 in prizes, including a two year subscription to Retro Gamer (so hopefully he should be reading this right now!) Second place was awarded to Stop the Express by Jetman's Dad, a remake of the old Hudson Soft game of the same name, while third place went to Andrew Pointon's Trashman Anniversary (featured elsewhere in this issue).

The overall quality of games in this year's competition was incredibly high, so here's to next year's competition, right? Well, with the 2004 competition taking up nearly eight months of his life, Steve is not eager to commit just yet. "If there is a 2005 competition it will be in a vastly different format, with many more people helping out." If you can offer your services, or maybe act as a sponsor, why not stop by the website (**www.remakes.org**)? The remakes scene needs you!

Important happenings in the wonderful retro world

This month // NES Classics Range // Retro Remakes Competition 2004 // Turbo OutRun on MAME // Retro Reading // Stunt Car Racer on Gizmondo // C64DTV Joystick // Retro Auction Watch // OrSam 2004 Show Report...

Turbo power

New MAME update plays host to Turbo OutRun

It's official. The arcade emulator MAME is exciting again, thanks to the latest build which includes full support for Sega's Turbo OutRun.

The recent Xbox version of OutRun 2 was packed with old-school extras, including the original OutRun and tracks from Daytona 2, but Turbo OutRun was sadly omitted. This was particularly disappointing as it's a well known fact that Turbo OutRun could not be MAME'd, as the game is encrypted. According to an online source, "The encryption uses a epoxy block that contains a custom 68000 processor, some RAM, and a suicide battery." We won't pretend to know what any of that means, but we're guessing that it's tough to crack. Anyway, cracked it has been, and the required version of MAME (v0.89) can be downloaded from **www.mameworld.net**. Enjoy!

Retro Reading

Ilex Press releases Digital Retro

Publisher Ilex Press's autumn catalogue features a number of titles aimed at gamers, including in-depth books on game design. One book that will be of particular interest to Retro Gamer readers will be Digital Retro.

Written by Gordon Laing, former editor of Personal Computer World magazine, this impossibly-glossy 192-page volume tells the complete story of home computing, beginning with 1977's pioneering MITS Altair and taking in 40 classic computers including Apple, IBM, Atari, Commodore, Sinclair and more.

The book features dozens of high-quality photographs – no Google Image Search used here – and the production values are second to none. It really is one for the coffee table. Digital Retro is priced at £19.95 and available from **www.ilex-press.com**.

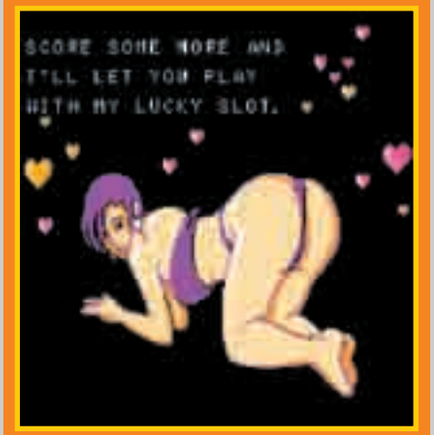
While on the subject of books, we'd like to quickly mention Dizzy: This is Your Life by David Crookes. David wrote our Dizzy feature back in issue two of Retro Gamer, and this new 68-page book is a fitting tribute to Codemasters' popular character, complete with a Dizzy history, game reviews and walkthroughs. The book is priced at £4.99, and 75p from each sold (basically the full profit) will be donated to the Royal National Institute for the Blind. David will be selling the book on eBay (search for 'Dizzy Book'), and you can also buy it direct by sending a cheque or postal order for £4.99 to David Crookes, 37 Trimingham Drive, Bury, Gtr Manchester, BL8 1JW.

RETRO AUCTION WATCH

Richard Burton reports on the latest online auctions

With the evenings drawing in earlier and the wintry fingers of Christmas flicking the V-signs at you, the online auction sites are becoming busier and chock full of nostalgic gaming wonderment as people start flogging off their retro wares for an extra bit of Christmas income. Of course, with the hundreds of gaming bargains to be had there are also several outstandingly overpriced items to dream about and drool over. Here are but a few...

In a previous issue of Retro Gamer we featured the slightly porno game Bubble Bath Babes. Well, as if by magic another game from Panesian Ltd, filthmongers to the gaming world, has made a rare appearance on eBay USA. The aptly



named Hot Slots is considered to be the rarest of Panesian's three games, the other unmentioned title being Peek-A-Boo Poker.

As with all the titles, a standard gaming recipe takes shape. Take a simple game, in this case a fruit

machine simulator, smother with pretty computerised ladies, whip in a few choice double entendres and finally garnish with an assortment of nipples for a risquéé but nonetheless, very sought after NES game. A very tasty dish and so it should be for a gut busting $417.99. As a finishing touch, maybe a splash of double cream wouldn't go amiss...

Closer to home and free from pixelated debauchery is the gloriously wholesome ZX81. Although boxed examples of the computer can raise in excess of £100, the games are generally fairly cheap to pick up, being only a few pounds each. Meteor Storm by dk'Tronics changed that somewhat when it reached a final bid price on eBay UK of £49.

Delving further back into the computing timeline we bump into the ZX80 and particularly one which was described by its seller as "Probably the best you will ever see!" Well, we don't know about that, but it was certainly the most expensive one we've seen, pulling in a colossal £577. This is by far and away the most highly priced ZX80 auctioned to date.

According to the owner of a Commodore P500 – basically a splicing together of a Commodore 64 with extra memory and a Commodore PET – these little beauties are rarer than the aforementioned ZX80. After raking in an impressive £353.33, we wouldn't

disagree. Apparently the P500 was recalled by Commodore after running into certification problems and the few that survive are demonstration machines that were sent to dealers.

Finally, it's back over the Atlantic to Canada where a boxed Fire Attack! Nintendo Game & Watch Widescreen ended with a final figure just short of £1,130. Why it should pull in that sort of money we're not quite sure however. The recent Retro Gamer Game & Watch price guide quoted this game at £100 boxed and, as of writing, the two boxed examples on eBay UK are both under £30. Intriguing...

Extreme Handheld Racing

Stunt Car Racer reborn for new handheld

The new handheld console Gizmondo is to play host to a remake of Geoff Crammond's classic Stunt Car Racer. The game, entitled Stuntcar Extreme, is currently being developed by Fathammer and is already shaping up nicely. The game will feature seven race tracks and 20 'retro-styled' cars to choose from. Like the original, there will be a multi-player mode available thanks to fancy Bluetooth tenchology.

There is a video clip preview on show at **www.gizmondo.com**, as well as more information on this and other retro-esque developments for the console, including Angel Fish, a vertically scrolling shoot-em-up, and Super Drop Mania, an interesting take on the Tetris concept.

RETRO ROUND-UP

Retro Gamer was in attendance at the recent OrSam 2004 show, held in Norwich. Here are the highlights

New Games from Cronosoft

Just as he'd done at last year's OrSam, Cronosoft boss Simon Ullyatt took the opportunity to launch the company's latest game at the event. The excellent ZX Football Manager 2004 for the Spectrum (reviewed this issue) costs a mere £2.99 (plus postage) and is a homage to Kevin Tom's legendary Football Manager.

Simon also took the opportunity to promote Cronosoft's current range of titles for other formats during the day, including Reaxion and Cyberwing. When we spoke to him he was getting rather excited about a new Vic 20 game currently in development. He wouldn't name it, but said that it would be in a similar vein to Manic Miner and contain 20 screens – impressive in itself, as the 16K RAM pack enabled machine couldn't quite manage a completely faithful version first time around. Simon then went on to explain that the game will likely run on an unexpanded machine! Needless to say we're hoping to see this title very soon but in the meantime keep a careful eye on **www.cronosoft.co.uk**.

Game in a day

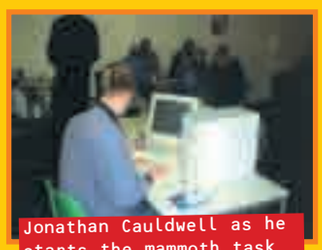
Further proving his programming brilliance, Jonathan Cauldwell set up his development machine and

C64 Reborn (again)

Play 30 classic C64 games on your TV

The current owner of the Commodore brand has finally released its new C64-based plug and play console, similar to those produced by Namco, Sega and Atari. As we predicted way back in issue five, it's styled around the classic Competition Pro joystick, powered by batteries and plugs into the A/V input on your TV. The device, named the C64DTV, has been launched in America first, through the shopping channel QVC, but will no doubt soon find its way to the UK and Europe.

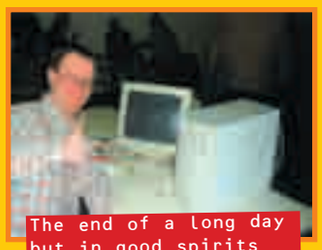
Epyx (and sport sims) fans are well served by the plug and play console. Included is the superlative California Games (amongst others from the Games series), as well as some arcade games including Speedball II, Slayer and Nebulus. More details will be available at **www.commodoreworld.com**. We'll be importing the joystick to give it a thorough test and bring you the verdict on the device next issue.


Jonathan Cauldwell as he starts the mammoth task

tackled the crazy challenge of writing a complete game, from scratch, during the event. Early on, it was clear that his idea was ambitious. He wanted to create a game based around the Thrust concept and while this seems simple enough, it's actually trickier than you'd imagine. He needed to code a simulation of gravitational pulls and the effects that using the thrust controls of the ship would have.

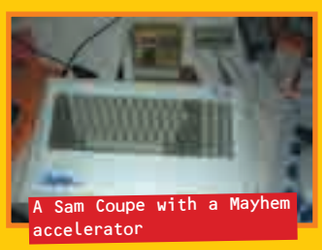
But if anyone could do it, it was Jonathan. He quickly had a basic engine set up and by the end of the day – to the amazement of most – he had completed the game, a screen-by-screen affair in which the player had to manoeuvre their ship around collecting bubbles. As you would expect, none of the bells and whistles, such as sound effects or music, were included but pretty much everything else was in place and the game was fully playable with just minutes to spare. The full game, now with music, will soon be available to download from Jonathan's homepage at **http://members.fortunecity.com/jonathan6/egghead/**

Jonathan's game in a day in action


The end of a long day but in good spirits

Mayhem at the OrSam

During the morning's obligatory setting up period it quickly became apparent that Colin Piggot from Quazar had something he was keeping top secret; even from us. No early peeks were allowed at the black box he was showing the internals of to his colleague. What could it be?


A Sam Coupe with a Mayhem accelerator

Eventually Colin revealed the answer – the Mayhem accelerator board for the Sam Coupé. This device, though still in the early stages of its life, plugs into the back of the machine, speeding it up to 12MHz, with half a megabyte of fast memory for good measure. Colin demonstrated the board by running the FreeScape games on it, and the improved frame rate was very noticeable.

Also on the Quazar stand was a modern looking silver computer with a widescreen TFT monitor and a PC keyboard. This was the much talked about Sam in a Can, the unusual British beast in a brand new housing. More information on this and other Quazar projects can be found at **www.quazar.clara.net**

Spectrum hardware

On the AY-Riders stand was possibly the best use of a PlayStation TFT "flip-lid" monitor we've yet seen. It was connected to a Spectrum 128+! This would make for an interesting mod if the two could be fused together in some way (and the monitor painted black).

Equally interesting was the device hanging out of the back of the machine; a Slovakian IDE interface which can use Compact Flash cards with a generic PC adapter. These devices, available in the UK soon, are an excellent way of sharing files between your PC and Spectrum at little cost – the price is rumoured to be around £30. As soon as we have more information on this intriguing piece of hardware, we'll pass it on.

An interesting use for a PSOne monitor

The RETRO FORUM

Say more with a letter...

Teenage kicks

I've just started collecting the magazine, issue eight being the first. I'm a massive retro gamer (although I like some of the new stuff as well), and the first computer I played on was my dad's C64 when I was just three-years-old. Over the years, I have played on many old retro platforms, including a Commodore VIC-20.

Now that I'm 18 I can really see how much games have changed throughout the years. Gone are the simple and fun games like Manic Miner. Here we are in the ultra-3D, ultra-violent world of gaming. GTA is one good example – although its violent content does upset me so I don't play any of them.

I've just finished reading issue nine, which is the best of the two issues I've read so far. Your feature on the Amiga was a joy to read, as the Amiga is my favourite computer of all time. The only problem with it was there wasn't enough about the top games available for it. You could have at least done a top ten like you did with the Gameboy feature.

I have also read the top 100 games, and I couldn't believe my eyes that the number one game was one I remember my brother playing on the C64. I have to agree that Elite was very impressive for its time. Its sequel, Frontier, was also excellent. A whole universe on one 3.5in floppy disk. Respect! Some of the other games on the list were fine too, although I must confess that my brother and I must be the only people to hate Halo. We played it and thought that it was so cheesy. You can even rotate your vehicle in mid-air. You can't get any cheesier than that, can you? I was also surprised to see that none of the Unreal games are in the top 100. Unreal, Unreal 2 and the Tournament Editions not only look great, but they are so much fun. I can't believe that they are always underrated by some. These games rock.

I really like your coverdiscs, especially issue eight's filled with Graftgold games. Its games were always great, with Uridium and Super Off-Road being ones I remember (we had Uridium on the C64, and I used to have the Game Gear version of Super Off-Road). As with Timo Reinikka's

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email in issue nine, I would also like to see a CD like this again. Perhaps you could do one with Team 17 games on like Alien Breed?
Andrew Potts, via email

RG: We're glad to see that the magazine continues to attract gamers of all ages, and whereas we can't comment on Halo without causing controversy, a Team 17 feature is in the pipeline. Whether or not we can get any of its back catalogue for our coverdisc is a different matter unfortunately, but we'll certainly give it a go.

Bits and bobs

I am a US citizen (sorry about the re-election of Mr George W. Bush, by the way) and subscribed to Retro Gamer a few months back. I love the mag – it's a dream come true!

I wanted to report a bit of an error in the Apple IIGS article. The author refers to the IIGS as a "16-bit" machine, akin to the Amiga and Atari ST. That comparison is inaccurate. The Motorola 68000 in the Amiga and Atari ST is a '16/32' bit processor in that it has an internal 32-bit architecture (32-bit registers, etc.) but sits on a 16-bit data bus. It does not communicate externally at 32-bits. The WDC 65C816 in the Apple IIGS is an '8/16' bit processor in that it has an internal 16-bit architecture, but communicates with the rest of the world in 8-bits. So if the Amiga and Atari ST range are considered 16-bits, then the Apple IIGS would have to be called an 8-bit. If you call the Amiga/Atari ST 32-bit machines, which you could with some accuracy, then the IIGS becomes a 16-bit machine. This is quite an important distinction that was not conveyed in the article.

I am a huge retro computing fan. Check out my list of machines here **www.blakespot.com/list** and also check out my vintage computing website, where I covered your magazine in an article at **www.bytecellar.com**.

I recently received a mint Spectrum 128 that I must wire up to my Amiga 1084S monitor (which can handle PAL signals) and find a proper power supply to experience what the Brits call 80's computing. I'm *that* serious about retro! I'm an avid Newton Message Pad user as well, going full force with the retro handheld from Apple.
Blake Patterson, USA, via email

RG: Thanks for the information Blake. I suppose the main point of note is that the IIGS was a major step up from the standard Apple II line.

Streets ahead

I help out with a retro gaming site that focuses on retro games and fan remakes for PCs and consoles. We also regularly update our emulation news. A main focus recently is Beats Of Rage, a homebrew fighting game made by Senile Team (**www.segaforums.com/senileteam**) which was released as a remake/addition to the Streets Of Rage games. It has become quite popular and now people are making their own games using what is known as the 'BOR engine'. The source for this has been released on **www.gamikaze.org**. The new version will be called BorG, and we anticipate this will bring many new people to the scene.

* Star letter *

Our well-dressed friends at Joystick Junkies (**www.joystickjunkies.com**) produce official clothing based on loads of classic videogames, and the winner can select any T-shirt from the range

Are you Elite?

So Elite is the best game ever according to RG readers? Well, I wouldn't dream of disputing that. The opportunity to go where you pleased and do what you wanted really set the game apart from anything else. A game where you played your occupation (miner, trader, assassin, pirate, bounty hunter, navy freelancer) rather than choosing it on some character generation screen. I know I was impressed at the time (who wasn't?) but in retrospect the game is even more of a towering monument to gaming genius.

Even recent space combat games can't beat the fantastic AI. I remember pulling an all-nighter with a friend, taking turns. One on the C64 flying the Cobra and the other manning the VIC-20 containing our database of planets, which showed us where to go for the hottest profits, or to rack up the kills. In the middle of the spree I caught myself in the midst of a protracted dogfight with a twisting and turning Cobra Mk I, thinking, "this guy's good". That's immersion. And then we found out about the forced mis-jump cheat that pushed you into witch-space, home of the Thargoids. Man, that's when the rating started jumping, if you could survive being attacked by three of them at once. Not one to attempt without an Energy Bomb. I haven't played Elite in perhaps ten years, despite emulation, but I can still remember all the keys (such sublime control), I can identify any ship, and I can remember some of the better trade routes (Qutiri to Isinor, only a few jumps from the start on Lave, was a particular favourite). Like so many others, Elite is permanently etched into my memory.

As for the rest, I was delighted to see such diversity. Not a single genre left out, and so many all-time peaches. The top 100 was another top-notch feature. Congratulations to you guys, and to Ian Bell and David Braben on crafting a game which has weathered two decades with no sign of rust.
Chris, via email

PS. Told you FFVII wouldn't top the poll!

RG: We're as chuffed as you that FFVII didn't make the top spot. Why not celebrate with a free T-shirt? Oh, and be sure to get hold of the Retro Gamer Anthology which includes a massive 14-page feature on Elite. It includes interviews with both Bell and Braben, and really is the last word on the game.

We thought you may be interested in doing an acticle on Beats Of Rage, Senile Team and Gamikaze, perhaps focusing on the game, the mods available and the upcoming BorG engine that will be fully XP compatible (as well as adding many new features to the engine). The game itself has been ported to PC-DOS, Win32, GP32, DreamCast, PS2 and Xbox, with a Linux and new Win32 version coming.
Zach Betts, via email

RG: We're always keen on covering the remakes scene, and try to feature as many remakes as we can on our coverdiscs. We'll certainly keep an eye on the Gamikaze website that you mention. As for a feature on Beats of Rage, well maybe a wider write up on game modding will be of more interest?

On the money

I picked up issue eight of Retro Gamer because I was bored while shopping and wanted something to read. I'm a big fan of the retro gaming scene, and thought the magazine looked interesting. I wasn't sure what to expect and couldn't skim through the magazine before I bought it (damn that plastic wrapping!), but suspected it might simply be full of Zzap!64 reviews or something.

I was pleasantly surprised to find it was full of interesting features and articles about topics and companies that were close to my heart. I was impressed enough to buy issue nine, which wasn't as good as issue 8 but still good enough to convince me to subscribe.

Issue 10 arrived recently and with it the most important message yet, namely Jon Foster's article on games he believed have been over-hyped. Now, don't get me wrong, I really am a keen retro gamer. I started with a VIC-20, moved to a C64, then went through an ST, an Amiga and a PlayStation before arriving at where I am now (PlayStation 2 and PC). One of the first things that I did when I got internet access was download emulators and favourite games, before graduating onto sites like **http://remix.kwed.org** and listening to old game music.

Jon Foster's article was, however, right on the money. Retro gamers, by definition, wear rose-tinted spectacles. Sure, there are still some gaming classics that have aged extremely well (Elite, Pirates! and Archon are three that personally spring to mind), but there are an equal number of games that were once great and now stink like ten-year-old cheese.

Personally, I can't believe that I once skived off school for half a day just so that I could play Karateka and Druid. Likewise, I was nearly reduced to tears to find that my once favourite Midwinter 2 actually has a 3D engine that is so sluggish that it is now totally unplayable in this post-Quake age. Syndicate has gone much the same way, despite previously being my A-Level revision's main competition.

I love retro gaming, but I'd rather play GTA: San Andreas than Pong any day of the week. Retro gaming is as much about nostalgia as it is about being a 'purist', and we would do well to remember that.

Jon's article was a brilliant addition to an already excellent magazine. It reminded us not to take retro gaming too seriously. It poked fun at those who still believe that games really were better when you had to wait 10 minutes for them to load, or those who really expect us to believe that they would prefer to play Kick Off 2 rather than Pro Evolution Soccer. Kudos to him for writing it, and kudos to you for printing it.
James Webb, via email

RG: The points that you raise are exactly why we introduced the Hall of Shame back in issue five (alongside the Hall of Fame, of course). We wanted to take a lighter-hearted look at retro gaming, reviewing some of the most appalling and insulting games in history, whilst giving credit to some real gems that perhaps many have either forgotten about or never played first time around.

Gaming vet

I am 36-years-old and have been toying with consoles and computers from the age of 11 upwards. I am very proud to have owned nearly all of the consoles and computers that you have mentioned to date. I also once owned a Phoenix arcade machine but was stupid enough to sell it.

My first console was an Acetronic MPU 1000; these consoles were slightly more affordable than the Atari consoles of the day, but Space Invaders was only just passable on my Acetronic. I finally graduated to an MB Vectrex, which was the closest thing to owning a miniature arcade machine at the time. The games were so addictive. Do you think that they will ever create a plug and play Vectrex just like those brilliant joystick-based games systems that are available now? Or better still, bring back the Vectrex?

Does anyone remember the brilliant Systema TV Boy that came out a few years ago? It contained 127+ games inside a tiny black casing, all of which seemed suspiciously like an entire collection of Atari games. Every game was there from River Raid to Space Invaders. I think that it was the first plug and play joystick-based game system ever made.

I would like to thank you for

rekindling the fire inside all of us that are old enough to remember programming the 3.58Kb VIC-20. Retro Gamer really is special to all of us. I haven't felt this way about a magazine since Commodore User, Crash and Zzap!64. It reminds me of the time when the C64 made a comeback in the early 90s and Commodore Force was launched. I just could not wait each month to get those Reel Action tapes.

Lastly, I really enjoyed the feature in issue 6 about building your own arcade cabinet. As I do not have the space at home for a full-sized machine, I decided to use my model-building skills and build a much smaller one instead. Take a look at the pictures that I have sent in. And don't laugh, as

Disappointed

I've been reading Retro Gamer since issue one and find it very entertaining, but I was very disappointed with the Don't Believe the Hype article in issue 10.

On seeing the contents page I was expecting an examination of some of the classic failures in game history, maybe with an examination as to what went wrong. I was hoping for a close up look at the flaws in Rise of the Robots, some of the Terminator games or maybe some of the later FIFA franchises. But no, instead we got the opinionated ramblings of a man who hates originality.

I've got nothing against opinion pieces in general if they approach a specific area with ideas and some reasoned argument behind them, but this was just a random trawl through games Jon Foster doesn't like, with the main justification being the fact he was no good at them. You can get this level of journalism for free at any Internet-based gaming forum, so please, no more.

On a more upbeat note, I really enjoyed the Game & Watch article. I had completely forgotten about these, thanks for reminding me. My primary school days were filled with endless hours of Donkey Kong. Are you going to do another article on the non-Nintendo ones? I remember Grandstand's Pocket Scramble being particularly good.
James, via email

RG: Jon's article has certainly got people talking, and that was the entire point. As you state, it was an opinion piece, and not necessarily the views of Retro Gamer. Some readers liked it though...

it is not size that counts, but functionality. It was also cheap as chips to build.

Simon Dando, via post

PS: Where are the likes of Jeff Minter and Rob Hubbard these days? Please could you track them down?

RG: Thanks for sending in the pictures of your scaled down-arcade machine. It looks like a really professional job. Taking your queries and points in order: we do recall the Systema TV Boy being available from Argos for a while, then disappearing without a trace. We're almost 100% certain that it was based around the Atari 2600. Regarding the brief C64 revival that coincided with Zzap!64 changing its name to Commodore Force; well things that come around go around. Look out for another mini-C64 revival soon. All will be revealed in our next issue. As for tracking down Jeff Minter... look out for a feature on Llamasoft in the very near future.

Unsafe

Let me first say that I am the proud, middle-aged owner of every issue of Retro Gamer so far and have no intention of ever parting with any issue on eBay, even if the selling prices get to 10 times what they are currently for the early issues. Each issue so far has been outstanding – keep up the good work!

However, with that said, I am annoyed about the Desert Island Disks article in issue 10 featuring Mystikal. Sorry, but who the hell is Mystikal and why would I be interested in hearing the street rantings of some uneducated yobbo who cannot utter a single sentence without putting a profanity in it?

I'm sorry but you have no excuses over this article – you have a wealth of programmers, old software houses and websites from where you can find informed, interesting people to give opinions on the retro gaming scene, and why you selected this person to offer commentary, purely because he mentions a few classic computer platforms in his 'songs', is beyond me.

Yes, I'm an old fogey geek who listens to the likes of Led Zeppelin and Deep Purple with absolutely no interest in rap music whatsoever and I'm just part of a generation that thinks the next generation's music is rubbish – like every generation that has come before and every generation that is to come.

But I also believe that the majority of your readership is composed of males either approaching or in their middle age – perhaps with the exception of fathers who have passed their interests in classic gaming to their sons. As such, the opinions of Mystikal, spiced with 'colourful' language will be irrelevant and serve only to lessen the content of an otherwise great magazine.

With that said, everyone is entitled to make a mistake once and I hope that, in future, you will look a bit harder for interviewees of Mike Singleton's and Matthew Smith's calibre who are going to have views of interest to your readership such that you can leave clowns like Mystikal to other magazines aimed at the teenage chav market.

Just continue to provide us with quality content and we, the fathers and uncles of modern gamers, will pass the retro gaming message down to the younger generation.

Peter, via email

RG: We're not sure Retro Gamer's readership is as cut and dry as middle-aged males. Feedback to the feature on our forum has been very positive, with readers appreciating Mystikal's somewhat slanted look at retro gaming. Paul is given a free reign when it comes to selecting castaways, and we're confident he'll always track down interesting characters. Who knows, he may end up chatting to Robert Plant or Jimmy Page one day!

Pocket money power

In my younger years, I used to save up my pocket money to buy the budget games from my local stockist. They were nearly always Mastertronic games for my Speccy, and they were usually good, especially at the price. Those days bring back such great memories, even when the games wouldn't always load first time around. This was usually because my brother had been using my Speccy tape player to listen to music and changed the volume level.

Anyway, the reason that I am writing is to say that, after seeing your magazine, I had to go on eBay and buy a Speccy again (I think the one I had when I was younger was sold at a boot sale at some point). I then discovered that I can still buy good Spectrum games at pocket money prices thanks to the website at **www.cronosoft.co.uk**, the only difference being that I'm older, and I don't have to save up to afford them. It is really great that they can offer good Speccy games at cheap prices. I feel like a child once more!

Keep up the good work gang. Any chance of a feature on the people who write Speccy games today?

Andrew, via email

RG: Companies such as Mastertronic and Codemasters certainly offered the players value for money, and usually entertaining games as well. It certainly is good to see Cronosoft keeping the spirit of budget games alive, especially considering the quality of the games available. As for a feature about developing games for retro systems, we spoke to Cronosoft's Jonathan Cauldwell back in issue two. Maybe we'll touch on the subject again soon.

Budget was best

I would just like to make a few points. Imagine my surprise when I was in my local supermarket looking for a magazine to read on the plane when I was going on holiday to find Retro Game on the shelf. Respect! It brought back all those memories of the days when I was locked in my room with my Amstrad CPC464.

Can I just bring to the attention of the readers and yourselves the arguments that used to be in the letters sections of the old magazines. As an Amstrad user, I always purchased Amstrad Action and AmTix. The arguments would always centre around the price of games and their quality.

The main culprits for poor quality games came from the big three software houses, being Ocean, Imagine and US Gold. At the time, I was only about 12 or 13, and could never afford to pay £9.95 for a game, so I would save up for weeks and go out to buy one of their titles. When I purchased the game Street Hawk, I cried for weeks! What a waste of money. Imagine my delight when Mastertronic and Codemasters brought out their games at just £1.99. I often wondered if the big companies where embarrassed by the general tat that they would release alongside the budget classics?

I have only been buying your magazine since issue seven and I wondered if you have ever done a feature on the worst games of all time from particular software houses such as Ocean. If not, how about doing one? Anyway, I'm off to get my Amstrad back out of the loft and sift through the 600 or so games that I had. Cheers!

Steve, via email

RG: The magazines of old would throw up many arguments, including the timeless "my machine is better than yours" one, which is happily something that we're leaving in the 80s. We seem to remember that Street Hawk was rubbish too (and weren't there two versions, with one being even more rubbish than the other?) Why not review it yourself and submit it to our Hall of Shame? Details are in the reviews section.

Memory lane

Reading Retro Gamer doesn't half bring back some memories of my old gaming days; I just thought you might like to know some of my tales and a couple of ideas for the magazine.

My first home computer was an Atari 400 with cassette deck back in the late 70s. It cost the same price as you would pay for a medium spec computer now. After about 12 months I got fed up with tape loading and bought an 810 disk drive and Atari 800 computer. The cost of these would certainly buy a top of the range computer today.

When the first computer games hit the local pubs and bars I can remember four of us playing Pong, the tennis game that started it all off. We used to have a mini knockout – the winners of two games went in to the final and the winner of the final had their entrance fee to the nightclub paid by the other three players.

A couple of years later, when the likes of Donkey Kong and Pac-Man came out, another local pub used to hold a monthly competition whereby the customer with the highest score won a gallon of beer. I can remember winning on Scramble, Rally X, Galaxians and Donkey Kong. I don't know if I fed the machines with more 10 pences than the beer would have cost, but it was sure fun trying for the top spot each month.

I've got a couple of ideas for the magazine. How about doing a really in-depth tutorial of a different emulator each month or so, with step-by-step instructions of all the different settings and maybe list the top five ROMs that work without any problems? Also, for fun, what about having a game of the month for readers to try and get the top score; maybe sending in a digital picture of the screen. I know this would be down to trust, but if you have to cheat it isn't worth playing. Anyway, keep up the good work.
Peter Sinclair, via email

RG: Playing videogames for beer? Sounds like a plan. As for emulator guides, we'll let our sister title PC Action Emulate! deal with that. High score challenges have been considered. Maybe we'll kick something off in the New Year.

Mr Biffo

Dear purveyors of dewy nostalgia. Just wanted to drop you a somewhat belated note of congratulations on the Your Sinclair freebie in issue nine. Until then, I hadn't realised quite how influential the mag had been on my own games writing, and without it I doubt I'd have ended up writing Digitiser on Channel 4 Teletext, let alone whatever the hell it is I'm supposed to be doing these days. Besides all that, it's always nice to find another piece from the jigsaw of your psyche.

Incidentally, this is the first time I've ever written a letter to a games magazine. Not bad for a musty old fart like myself.

Keep up the good work – you're always a splendid read. And please excuse the dampness of this email; it's just the tears of wistful sentimentality I sobbed over your marvellous Game & Watch feature.
Paul Rose, via email

As long time readers of Digitiser, we're honoured Paul. You've really made our day!

Retro PCs

Having played computer games for 20 years I was thrilled when I stumbled across an ad for Retro Gamer on the web. My first computer was a C64, and I still play some of those old games from time to time, using a C64 emulator. So, reading Retro Gamer brings back a lot of good memories.

I was wondering about one thing though. What about PC retro games? A lot of the games covered in your magazine were also released for the PCs of the day, such as Summer Games, Dizzy, Barbarian (released as Death Sword), Outrun and many more.

It could also be cool to take a look at an almost vanished game genre; the 'type-in' graphic adventure games that was extremely popular back in the 80s and early 90s. I don't know how many hours I spent with Space Quest, Police Quest, Leisure Suit Larry and similar adventures, but it wasn't a few here and there.

It would be great if parts of the magazine could include some PC classics. The website Home Of The Underdogs covers both classic and newer PC games, and is a superb resource. It can be found at **www.the-underdogs.org**. Keep up the good work.
Ulf Aasen, Norway, via email

RG: An interesting point, and one that has been raised before on our Web forums. The thing is that *most* of our readers will have owned an 8-bit home computer during the 80s, and probably progressed onto 16-bit machines such as the Amiga or Atari ST. Although many classic games did appear on the PC, not many people will remember them first time around. Undoubtedly, it will make for good reading, but there are no plans just yet.

eMag

RETRO REVIEWS

From old games on new platforms to new games on old platforms. As long as it's retro, you'll find it in our regular reviews section

If you would like to enter a game into either our Hall of Fame or Shame, send in a review (of up to 650 words), with ratings explaining why your choice deserves a place on the mantelpiece or a trip to the bin. All reviews are gratefully received at **reviews@retrogamer.net**, and we'll consider them for inclusion in a future issue...

Metal Dust

Publisher:	Protovision
Price:	Euro25
	(UK postage free)
Format:	C64/128+Super CPU

The Metal Dust story started back in 1995 as an attempt to create a shoot-em-up for the Flash8 accelerator. This device was fraught with compatibility problems, and the project was halted until CMD launched its more stable and compatible SuperCPU accelerator in 1997. When CMD's device started to gather a cult following, the Metal Dust project was reborn, and despite many delays and doubts, it's finally here.

This game is a horizontally scrolling shoot-em-up of truly epic proportions, with all of the slickness of a 16-bit game thanks to the processing power of the SuperCPU (a similar CPU to that used in the SNES, but faster). Initially you feel like you're playing an impressive sprite-multiplexed demo as the screen is crammed with detail and animation. This soon dissipates as play commences.

It is very apparent that a lot of thought has gone into Metal Dust. For instance, the backdrops are interactive: flying through a waterfall forces your ship downwards. You also start each level shielded, but only from the invading crafts and not from the walls, static rocks or other parts of the scenery.

Many games have influenced Metal Dust. Some obvious, like R-Type and Turrican II, and others not so obvious, including Delta and the lesser-known Lions of the Universe. Metal Dust goes beyond these and provides a rock-solid shooter with intelligently designed levels and gameplay. Many of the mid- and end-of-level bosses really are ingenious, and we're especially impressed with those in the second level.

If you want to see C64 technology (the VIC-II and SID chip) stretched to within a fag paper of its absolute limits, you can't go wrong with Metal Dust. It shows off the capabilities of an expanded C64 whilst being very playable and enjoyable. If you don't have a SuperCPU, the project's producer has revealed that Protovision is porting the game to mobile phones.

Shaun Bebbington

Graphics 95%
The in-game graphics are virtually flawless for the VIC-II chip, driven by the extra power of the SuperCPU.

Sound 95%
The SID chip reaches almost burn-out with probably the best sampled music and speech from a single chip.

Playability 93%
A complete blastarama from the start. Shoot-em-up fans will be hooked.

Addictiveness 91%
Difficult, even on easy. But like all good shooters, it keeps you coming back.

Overall 92%
A unique shoot-em-up for an upgraded C64, worthy of its development time and price tag.

Zx Football Manager 2005

Publisher:	Cronosoft
Price:	£2.99 + p&p
Format:	ZX Spectrum

Many thought that this year's OrSam show would see the final public release of Reaxion. As predictable as the outcome of an American Presidential Election however, Cronosoft instead launched ZX Football Manager 2005, developed by the Russian-based Triumph Games Lab.

A tribute to Kevin Toms' classic Football Manager, the game sees you drafted in to manage a top division team as its current manager is out of action. The aim is simple; choose your best players from the current squad of 20, trounce the opposition, win the league and cup and increase the bank balance of the club. As you'll soon find out, this ain't no kick about in the park.

The backdrop that greets you is a picturesque stadium, overlaid with detailed icons. From here, everything is pointer driven. The first thing to do is to assess each player in your squad, then work out who should play for you based on their skill and fitness levels. If you're lazy, you can simply delegate this to your coach, allowing him select the best team. If you prefer to use your own tactical genius, then a pen and paper is essential for making handy notes.

Once you've got the perfect team, or the best you can muster, it's time to start sending scouts out to look for new talent. You have two scouts, one of which will watch certain clubs whilst the other will look out for particular player attributes. Both take up to three weeks to complete their task, but if you have a particular weakness in your current squad then it's worth doing. If you want to buy or sell players the transfer market is only open between certain weeks within the season.

With all of the planning done, you're ready to kick off. However, you can make last-minute checks on the opposition as it might be they're weak in defence, for instance, and you can adjust your team accordingly. You may also view their league position, as well as other fixtures.

On starting the match the results appear per league (or cup) game. It may be a short while before you see your result, but this isn't too much of an inconvenience and allows you to see goal scorers and offenders from the other games. Making notes of the results may also give you an indication of how good other teams are. You'll feel like a real tactician now.

Once you've tasted the sweetness of victory, or the bitterness of defeat, you can view the cash flow results the match generated through TV rights and ticket sales. The better your team performs, the more lucrative it might be. If you find yourself struggling, transfers in and out of the club can help. And if you're spending copious amounts on buying players, or the team is performing badly – or a mixture of both – then it will be time to turn to the banks who will loan you £8,000,000 every time your balance reaches zero. This will only happen six times before the game is over.

At the end of each season, success will see the money rolling in, with a £6,000,000 payout for winning the cup and £10,000,000 for the league. Then it's time to renegotiate the contracts, where appropriate. Being careful with cash isn't so much of a bad thing, as there are usually players on the market who could potentially save you money. Those who are unhappy with a tight-fisted approach may move on though.

Cronosoft has come up with the goods yet again in publishing the best 8-bit football management game we've seen in ages. We have a few niggles with the game mind you. We would have liked to have seen a choice of teams to manage, and something that would allow you to change the names of individual players and clubs before the season starts. These are just niggles though and this is an otherwise excellent game.

Shaun Bebbington

Graphics	88%
This game is slickly presented with some high definition colour effects.	
Sound	n/a
No sound whatsoever. Not even the Match of the Day theme. Never mind.	
Playability	85%
You'll find taking charge quick and easy. Now get out there and win.	
Addictiveness	88%
One game becomes one season, and before you know it you're four seasons in.	
Overall	87%
Cronosoft FC 1, Sports Interactive FC 0.	

Ms Pac-Man Maze Madness

Publisher:	Zoo Digital
Price:	£19.99
Format:	Gameboy Advance

It's great to see the pill-munching diva back in action once again. In this adventure, Maze Madness, Ms Pac-Man must assist Professor Pac in retrieving the lost treasures from the forgotten labyrinths of the old worlds. This title contains many of the elements that made the original Pac games such a hit, but goes further than simple top-down chomping action, as you will discover as you progress.

The game is viewed from a side-on 45-degree viewpoint, with Professor Pac (who obviously has more important things to do) appearing as a futuristic hologram at certain points on the earlier levels. This is to offer you guidance on your quest and to help settle you into the game,

something which is probably more relevant to younger players than to us experienced retro heads.

Once the old Professor has started you off, a simple maze and munch affair ensues. During each level you need to eat a certain number of pills in order to progress further. And as you delve deeper into this munching venture the nature of the game evolves, featuring puzzle elements and ideas borrowed from Bomberman, with the TNT carts, and Sokoban, with the strategic placements of blocks and platforms. These not only make the play more interesting, but open up each level to reveal its secrets. At the end of each level, you are awarded points and stars based on your performance.

There are 13 levels, split into four separate worlds themed on Egypt, Antarctica (well, icy caverns anyway), an old city and a haunted house. Aside from solving the puzzles, you are almost compelled to explore each level to discover its secrets. In doing so, you earn more stars, and thus rack up more points. Ms Pac-Man Maze Madness is aimed at a younger audience, but still provides enough retro-styled gameplay to keep you happy.

Shaun Bebbington

Graphics 79%
Cute, well animated and nicely designed. The one small problem is that it's not always easy to see the different heights of the platforms.

Sound 75%
Fully retroed-up sound effects accompany the background music.

Playability 79%
The learning curve is perhaps a little too lenient, but is nonetheless a very playable game.

Addictiveness 76%
There is enough to keep you coming back certainly as the puzzles become more involving.

Overall 77%
A solid release, but one aimed at younger gamers.

Pac-Man World

Publisher:	Zoo Digital
Price:	£19.99
Format:	Gameboy Advance

Coming home from a hard day's grafting, Mr Pac-Man finds that members of his extended family have been taken captive by his arch-nemesis Toc-Man. The kidnapping was apparently organised by Toc's cronies as a surprise birthday present, but when Toc realises that the Pac-Man hasn't been snatched in the raids, he turns nasty. Seeking revenge, our hero heads over to Ghost Island to rescue his friends and family, and his adventure is re-enacted on the GBA as perfectly as the original PSone version.

As with Ms Pac-Man's outing in Maze Madness, there is the traditional chomping action, with power pills having their usual effect on your foes. Pac-Man

World is more open and platformy though, featuring a 3D environment full of platforms and hazards. Along the way you'll find hidden bonuses and treasure.

The gameplay sees Pac-Man acquiring a range of handy moves to help him on his way. There is the Butt-Bounce and Super Butt-Bounce, used to open treasure chests, destroy foes of a non-ghostly nature and to get up to those hard to reach platforms. Pac can also barge doors and enemies, swim and jump and grab platform edges to help further exploration of each level.

To add interest, different levels have different settings. For instance, you start off on an island, and later on you get to visit Toc-Man's outposts in deep space. Luckily, Pac's diet of pills and more pills hasn't impaired his ability to swim; as you'd expect his weight and shape give him a certain buoyancy. Special power-ups will allow Pac to walk on the riverbeds, enabling him to hoard yet more collectables.

The game is a neat mix of traditional platform action coupled with Pac-Man's desire to eat everything in sight. It's great to see Pac-Man so nimble after all these years.

Mike Davies

Graphics 82%
Smoothly animated and pac-ked with loads of detail.

Sound 78%
Fitting music accompanies the game play.

Playability 84%
Plays really well, adding enough new elements to the traditional Pac theme to make it feel fresh.

Addictiveness 88%
Nice big levels that keep you exploring.

Overall 86%
An excellent update of the PSone original. Perfect fun for the GBA.

Atari Anthology

Publisher:	Atari
Price:	£19.99
Format:	Xbox

First there was the Activision Anthology, then Midway Arcade Treasures. And now another collection of old games for new consoles, this time from Atari. Veteran publishers are certainly resourceful, but why should we complain? Especially as many of these packs represent excellent value for money and will surely rise in value, making them of interest to both nostalgia fans and retro collectors alike.

Atari Anthology is basically an Xbox version of a 2003 PC collection entitled Atari 80: Classic Games in One. And that's exactly what you get for your money – 80-odd games, with the vast majority taken from Atari's own 2600 back catalogue. Familiar classics such as Adventure, Missile Command, Super Breakout, Centipede, Millipede and Yar's Revenge are all included; along with many more obscure titles, some of which we'd never played before. The cream of the collection, however, is the inclusion of 18 Atari arcade classics. These versions are understandably a clear cut-above their 2600 counterparts, with the original vector titles like Tempest and Battlezone still managing to raise the hairs on the back of the neck. Some people have complained that the vector games are not emulated 100% accurately, but we can't find fault.

So what else does the Atari Anthology contain? Well there are all the usual extras and supplementary material you'd expect in such a collection, including packaging artwork, instruction manuals, background information on each game and video interviews (including one with Nolan Bushnell). The one downside is that navigating from game to game can be a real pain, thanks to a good-looking but difficult to use interface. Still, this doesn't take the shine off an excellent value package.

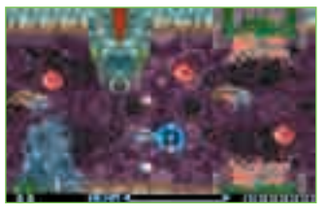
Mike Davies

Graphics	n/a
Sound	n/a
Playability	88%
Emulation is generally spot-on and the controls are well mapped to the Xbox pad.	
Addictiveness	92%
The simple nature of the games will keep drawing you back.	
Overall	90%
Over 80 Atari games for £20? You can't really go wrong.	

R-type III

Publisher:	Zoo Digital
Price:	£19.99
Format:	Gameboy Advance

The GameBoy Advance is regularly criticised for the number of SNES ports it receives, with Nintendo itself often the biggest offender. R-type III is another SNES port, but it's more welcome than most, as the original was an superb shooter, far superior to the SNES's Super R-type (a bastardisation of stages from R-Type and R-Type II that suffered from chronic slowdown). Furthermore, R-type III was a SNES exclusive. It never appeared in the arcades and never graced any other platform. So of all the SNES ports, this is one people have been waiting for.



The basic structure of the game remains unchanged, with you once again going up against the evil Bydo empire, using your 'force' power-up system to chip away at its mighty defence system. As before, you can charge up the force by holding down the fire button, then letting go to unleash a searing ball of energy. There's a twist too, as you can switch to 'hyper' attack. In this mode, your charged force will fire off a constant stream of energy. This is great for dealing with the end-of-level bosses, but the flip side is that the force will overheat, and you must wait for it to cool down before you can fire it up again. In addition, there are two new types of force device to choose from – Shadow Force and Cyclone Force. These work in much the same way as the standard Ball Force, but they open up access to new laser attacks, and actually require you to alter your play accordingly.

R-type III is a classy space-based shooter. It's perfect fare for the GBA, with its pick up and play nature. The port is generally very good, although it is let down by poor renditions of the original music. Don't let that put you off though.

Martyn Carroll

Graphics	85%
Great use of SNES Mode 7 graphics.	
Sound	50%
The game's weakest point. Not much better than MIDI.	
Playability	80%
It's classic R-type with a few refinements.	
Addictiveness	86%
Seven levels of intense action will keep you hooked.	
Overall	83%
A perfect companion cart to R-Type DX on the GameBoy Color.	

GoldenEye

Developer:	Rare
Year of release:	1997
Format:	Nintendo 64

This is it. The daddy. The king. Call it what you will. For me, this game will be in my life forever. Forget the EA games and the endless sequels, this is the most defining game ever for the Nintendo 64. Surely this is the game that sold N64s everywhere?

The game followed the Bond movie plot very closely, with an evil-doer stealing a top secret satellite from the Russians and plotting to use it against the world. Even the Library level, where you had to escape with Natalya, followed the part in the movie flawlessly. Smooth scrolling allowed for a very playable experience, and the cheats made it even better. Turn on all the weapons and put in an invincibility code and you could wander about the levels shooting tank shells from your nose. Talk about an explosive sneeze!

The graphics were cool (apart from the blocky-head syndrome when close to other characters), the levels were well thought out, and the controls were the most responsive I'd ever used.

I also liked the fact that you could just run the bad guys over (when in control of a tank) with a very humorous squash followed closely by a satisfying crunch. And the multi-player mode was simply a joy to behold. Plug in three extra pads, set weapons to explosives and play in a very claustrophobic level. Explosive fun and mayhem ensued, especially after the odd beer or two.

With a few extra levels and weapons to unlock, it is a must have game. If you haven't got this in your collection, then get it. And if you haven't got an N64, buy one with GoldenEye. You won't regret it.

Michael Wilcox

Graphics	**87%**
A little fuzzy and I've never known Robbie Coltrane to have a square head with a little point on top.	

Sound	**89%**
Good use of the Bond tune, funking it up like in the movie.	

Playability	**89%**
With a great control system and comfy control pad, it's easy to pick up and play.	

Addictiveness	**90%**
Loads of weapons and tons of levels. The hidden features and play modes to unlock means you'll be playing this until the four horsemen come knocking.	

Overall	**91%**
Still unbeaten on any home system, this is the definitive game for Bond and FPS fans alike.	

Frak!

Developer:	Statesoft
Year of release:	1985
Format:	Commodore 64

Envy is a terrible thing, especially in a young child. Chants though the playground of "my machine is better than yours" and so on still haunt and shame me to this day. Why did I buy a stupid Commodore 64 when I could have bought a (insert your preferred machine here)?

One of my best friends owned a BBC Micro. Apart from having the best (in my opinion) version of Elite ever created, he also had an incredibly addictive game called Frak!, featuring a caveman complete with an attacking yoyo. You moved him through standard platform and ladder screens collecting diamonds. Big monsters and small balloons were in your way, with knives falling from the sky. Touching anything apart from diamonds killed your caveman instantly, at which point he would shout "FRAK!", presumably some sort of caveman swearword. Using the yoyo you were able to 'shoot' the balloons and monsters off the screen. The level ended when all the diamonds had been collected.

StateSoft produced the Commodore 64 version of the

game, which I eagerly snapped up with the last of my week's pocket money. Getting it home and giddy with excitement, both I and my smug BBC-owning friend waited for it to load with anticipation. It was all looking good and he was reeling with envy; I smiled a "my C64 is a cool machine" smile. I pressed the fire button, but very quickly sank into the back of my chair in total horror. Oh no! How did a great game turn into such a poor port? Mainly by using such oversized sprites. The problem was they were so big that you couldn't see enough of the screen, making it very difficult to manoeuvre and work out a route through each level. You often had to jump blind and hope that a platform would save you. It is for this reason that I offer it up to the Retro Gamer Hall of Shame.

Nigel Parker

Graphics	**70%**
Nice animations, very amusing.	

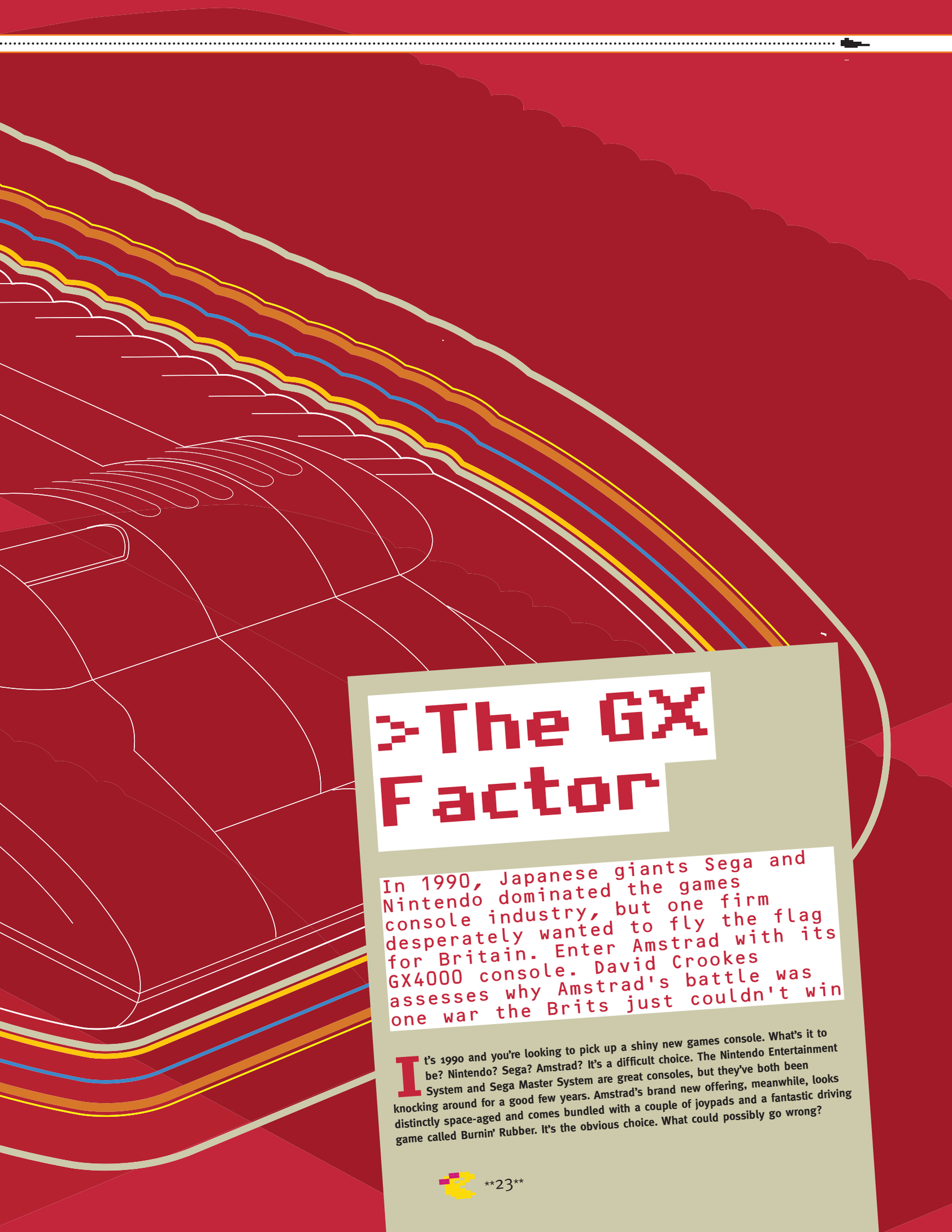
Sound	**60%**
Sparse effects throughout but occasionally humorous.	

Playability	**20%**
Arrgh! Or should that be Frak!?	

Addictiveness	**80%**
Even though it's nearly unplayable, it features addictive gameplay	

Overall	**50%**
It's just a shame that it's such a poor port. Get me a BBC Micro please!	

eMag



The GX Factor

In 1990, Japanese giants Sega and Nintendo dominated the games console industry, but one firm desperately wanted to fly the flag for Britain. Enter Amstrad with its GX4000 console. David Crookes assesses why Amstrad's battle was one war the Brits just couldn't win

It's 1990 and you're looking to pick up a shiny new games console. What's it to be? Nintendo? Sega? Amstrad? It's a difficult choice. The Nintendo Entertainment System and Sega Master System are great consoles, but they've both been knocking around for a good few years. Amstrad's brand new offering, meanwhile, looks distinctly space-aged and comes bundled with a couple of joypads and a fantastic driving game called Burnin' Rubber. It's the obvious choice. What could possibly go wrong?

The GX4000 arrived in a fanfare of glory in September 1990 priced at a very competitive £99. It was billed as the British console which would play the industry like a game of Space Invaders, shooting Nintendo and Sega out of the sky. There were promises of games aplenty and assurances of support. Software developers were told that the machine would be their pathway to riches.

But it wasn't. Because within eight months, the big chains had completely given up on the machine and it was being flogged in independent stores for as little as £30. Up until that point the firm had been highly successful with its CPC and PCW range of computers, but it was left staring failure in the face for the very first time.

Why was the GX4000 such a failure? On the face of it, the console was certainly impressive enough. It had the looks – its futuristic styling being more eye-catching than the NES or Master System. It also had the graphics, with Burnin' Rubber looking like no other 8-bit game. Developers had 4,096 colours to choose from – 32 of which could be displayed on screen at once, giving millions of combinations. And it featured built-in support for hardware sprites, allowing for images to be drawn quickly. These special tricks, which also included fast, smooth hardware scrolling, made for beautiful-looking games which were almost on a par with the 16-bit machines. So in actual fact, everything seemed perfect. The European big guns such as Ocean, Gremlin, Titus, Loricel, and Domark were on board and it was all geared up for the UK and France to grab some of the action away from America and Japan.

The third man

Amstrad was canny and deliberately didn't follow the path of Nintendo and Sega. Both of these companies strictly dictated who wrote for their machines, but Amstrad allowed any software publisher to write for the GX4000 – the only stipulation was that the packaging had to follow a pre-set format. As far as the actual software was concerned, there was complete free range for software houses to do whatever they liked.

Amstrad boss Sir Alan Sugar said as much at the launch when he quipped "We don't just see this as Amstrad fighting Nintendo and Sega, we see this as Amstrad, together with companies such as Ocean and others who want to make some money and who do not want to be dictated to, fighting against these people."

But Amstrad had another scrap on its hands – the critics who thought it was somewhat strange that an 8-bit machine was being released at a time when 16-bit

Amstrad boss Alan Sugar, seen here at in 1984 at the launch of the CPC 464

The bundled game Burnin' Rubber showcased the power of the GX4000

was becoming the norm. They doubted Amstrad could damage Sega and Nintendo and become a third player, in the same way the CPC had muscled in on the Spectrum and Commodore 64 in the 1980s. But Sir Alan begged to differ. "We basically feel we are in the same situation as we were in 1984. We have observed there is a big market to be had in this business and we are a powerful company with lots of money and resources and we will take a share of that market."

Sir Alan's thoughts were – predictably – echoed by Amstrad managing director Malcolm Miller. He told Amstrad Action magazine at the time: "When we first entered the computer market with the original 464 in 1984, some commentators said we'd never make it – the market was too crowded and there were already a couple of major players who looked to have an unassailable hold. Well as you know, we didn't just survive, we grew to dominate the market in the UK and Europe."

Although Mr Miller was stretching the truth somewhat, the CPC had been successful. It had sold 2.5 million machines by 1990 and had more than half the market in France. With that level of success, Amstrad felt it was wise to model the GX4000 on the 8-bit CPC series of computers with some extra hardware bolted on. The CPC was six-years-old at the time but there was confidence within Amstrad that it didn't matter. Indeed, Sir Alan shook off all accusations that Amstrad had arrived too late and he was absolutely certain the public would ignore the Master System, the NES and the Megadrive (which was also launching in the run-up to Christmas 1990). One look at the GX4000's bundled game, Burnin' Rubber, he hoped, and the punters would immediately reach for their wallets.

Sugar had a simple outlook on electronics - people will buy what's good value and looks good. He had earlier bundled an amplifier, twin cassette decks, a turntable and radio into one unit, created the midi hi-fi, made it look impressive and ensured it ran with just a single power supply. It was snapped up by millions. His firm then invented the CPC, an all-in-one computer, cassette deck and monitor, again all powered from one plug. That too went on to sell in droves.

He believed people didn't make too much fuss over bits and bytes, and at the launch of the GX4000 he said: "The end user doesn't know whether it is 16-bit, 8-bit, or if it is working

Not only did the console look space-aged, but the box was adorned with the images from some bizarre interstellar battle

with gas or steam or with elastic bands." His comments had a ring of truth, as the console market had since proved beyond a doubt that the buying public will not always opt for the most powerful machine, but six-year-old technology? Surely the public wasn't that easy to fleece?

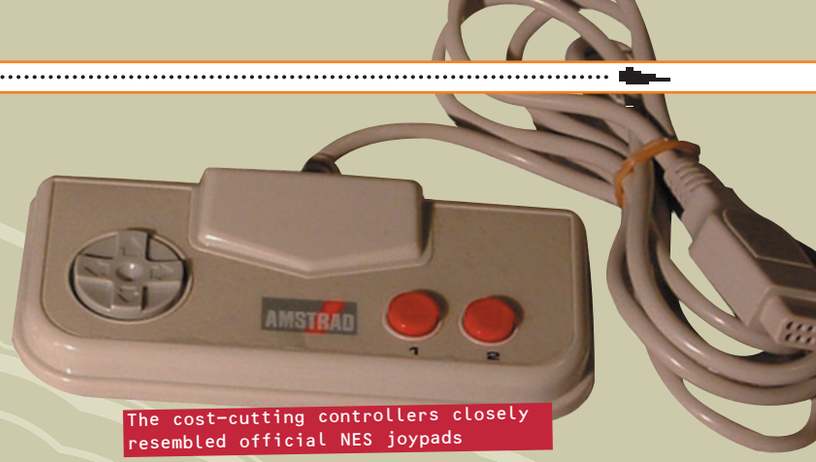
Tech specs

Despite its undeniable 8-bit roots, the console didn't fare too badly in the way of technology. It could be plugged in to a television in one of two ways: via the aerial socket or via a SCART connector – not even the Megadrive had SCART support. It could also be connected to a dedicated Amstrad monitor. It had a pause button which froze games mid-way, two ports for game controllers, a port for an analogue joystick, a slot for a lightgun and an LED light that indicated whether the machine was turned on or off.

When turned on, the screen would go fuzzy – no PlayStation-style intros – until you inserted a cartridge. The game would then instantly flick into action when you moved the switch into the 'on' position. This also locked the cartridge firmly in place so it couldn't be removed mid-play.

The controllers were very basic, feeling uncomfortable and cheap, and the direction pads were a tad too small for some hands. Then again, Amstrad's technical guru Roland Perry said the GX4000 was based on CPC technology because the firm wanted something which would make it "easier, cheaper and quicker for us to produce". Perhaps the quality of the controller – like the quality of the joysticks given away with the original CPC range – was the trade off.

To hammer home the message that Amstrad meant business with its new offering, the firm went for a big launch. Famed for its money-conscious approach to business, it was something of a surprise that the company decided to unveil their machine at the plush Hotel Meridien in Paris, but then the CPC was always popular in France and Sir Alan was keen to capitalise on that. The GX4000 was released at the same time as the Amstrad 464Plus and 6128Plus, the difference being that the former just played games while the latter two were fully functioning computers. All had the capability to play cartridge games and it was Amstrad's way of broadening the market for the titles while giving people a choice.



The cost-cutting controllers closely resembled official NES joypads

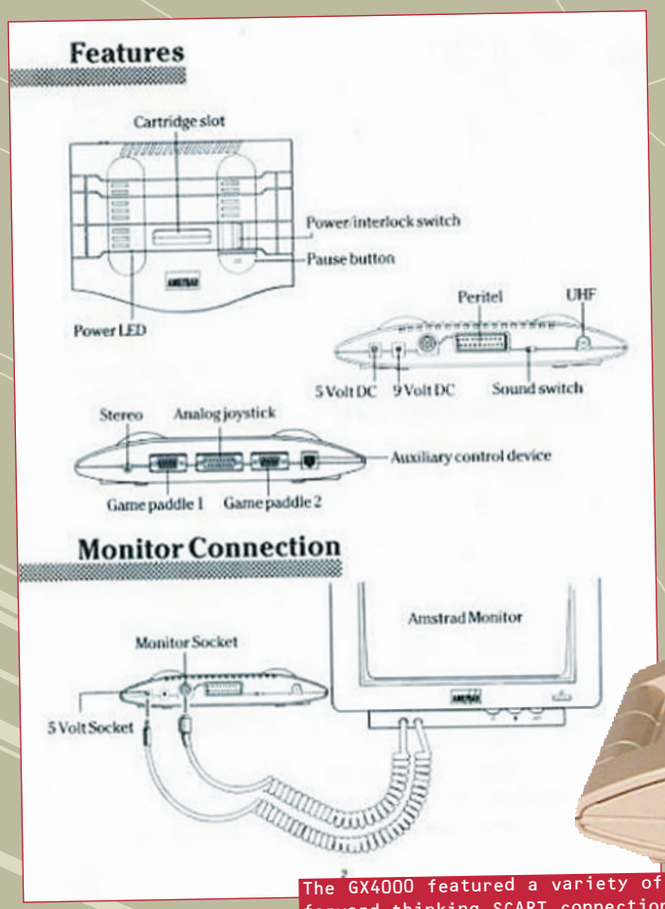
Amstrad's software manager Peter Roback made it clear he saw the GX4000 as an entry-level machine, one which was aimed primarily at children. He believed parents would buy their kids a GX4000 and after a few years decide to upgrade to a 464Plus or 6128Plus to enable little Johnny or Jill to word process or write their own games. The idea was they would have a bank of console games which they could use on their new machine and also take advantage of the huge number of titles made for the original Amstrad CPC range.

Among the games being showcased at launch were Batman the Movie, Shadow Warriors, Operation Thunderbolt, Chase HQ 2, Fire & Forget II, Robocop 2, Klax, Crazy Cars 2, Escape From The Planet Of The Robot Monsters and Kick Off 2. It was unquestionably an impressive line-up and it seemed to back up Mr Miller's assertion that it had the support of some good, solid names. "Without the support of major software houses, our success would be severely limited," he said, almost prophetically.

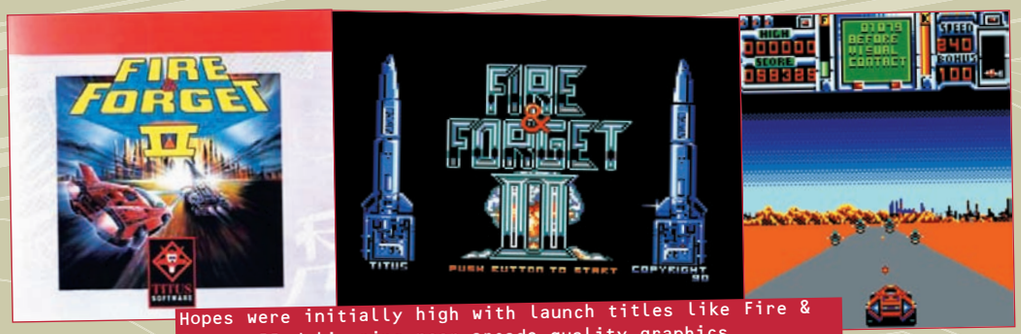
Amstrad tried hard to promote the machine after its launch, spending £20 million on a pre-Christmas push. Commercials appeared on television across Europe and adverts were placed in the press in the lead up to the festive period. An in-store demonstrator, similar to those found for the PlayStation, Xbox and GameCube in today's shops, was created for independent computer outlets, showing off the console in all its glory and with 12 games to try out.

Game drought

One of the first games to be released was Titus' Fire & Forget II, a fast and frantic driving game. As the player sped along, blasting baddies, avoiding landmines and destroying the end-of-level guardians, it was impossible not to marvel at the wonderful graphics. It looked like an arcade game and felt like an arcade game. All that was missing was a slot for the 10p pieces. The same was said of Gremlin's equally fantastic Switchblade and Ocean's Robocop 2. The quality of the titles was there to see and there was confidence that the console would make some headway and prove the critics wrong. Even after a couple of months, software houses were still queuing up to get in on the action. Audiogenic expressed interest, as did Codemasters. The latter – used to knocking out budget games for £2 or £3 – said it was thinking of working on full-price releases, to retail at the generally accepted GX4000 game price of £24.99.



The GX4000 featured a variety of ports and connectors, including a forward-thinking SCART connection



Hopes were initially high with launch titles like Fire & Forget II delivering near-arcade quality graphics

But this activity was papering over the cracks, as there was quality but certainly no quantity. 12 games were promised within eight weeks of the launch, yet months later it was difficult to find even six. Even now, no-one is 100 per cent sure how many games were actually released. Some say 25, some believe as high as 35.

One of those who bought the machine at launch was Amstrad enthusiast Chris Weatherley, from Herefordshire. He had shunned the Megadrive in favour of the GX4000 and bought the machine along with Robocop 2 and Pang. But it soon became apparent to him that there were problems. "As money was tight, I had to save up," he recalls, "but by the time I had enough money for another game, the machine was already failing." Within months on the launch, nobody seemed to care about Amstrad's offering. Retailers and punters were shunning the machine and its paltry selection of software in favour of Sega and Nintendo titles, whose games, incidentally, were available everywhere – from specialist computer shops to high-street chains and supermarkets. Amstrad releases were nowhere to be found.

What exactly was the problem and who was at fault? Amstrad blamed publishers for missing deadlines, resulting in delayed on-sale dates, while the publishers blamed Amstrad for taking months to duplicate and ship games rather than the promised weeks. When the games finally did arrive, it was more of a wimpy trickle than the expected rush.

Worse still, some software developers were under so much pressure to get games out for the console that they were porting games straight from the CPC to cartridge, not bothering to use any of the machine's enhanced features. Up until then, there was an acceptance that to do the GX4000 justice, games would have to be written from the ground up and not just adapted from existing CPC code. Chris said: "I bought Operation Thunderbolt and found it was near identical to the CPC version. After reading more reviews, I realised half of the games released were cartridge versions of the standard CPC games. I stopped buying games because of this, and I think many people did the same."

"I don't believe the GX4000 failed because of its technology, cost or most of the games' quality," continues Chris. "Robocop 2, Pang, Pro Tennis Tour, Fire & Forget II and even Burnin' Rubber prove the machine was capable of great things for an 8-bit console – better graphically than both the NES or Sega Master System. But what Amstrad should have done is released the GX4000 earlier – long before the Megadrive came out. The signing of software houses like Codemasters would have been a great move. Many games were being released under these houses at the time. Ocean was Amstrad's only saving grace."

There were some exceptions. Gremlin released Switchblade for the console before creating a tape/disk version for the old CPC range. The graphical differences were stark. The four-colour mode was used on both versions, but because the GX4000 had 16-colour sprites, it enhanced the look of the game immensely. And Gremlin admitted it felt the GX4000 version was "slightly better" than the 16-bit Atari ST version. A triumph! But it didn't stop Amstrad and its loyal customer base from being caught in a vicious circle. There were too

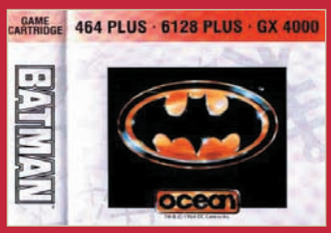
>GX games

It's difficult to say exactly how many games were eventually released for the GX4000 besides the bundled Burnin' Rubber, but below is a selection of titles that were definitely available

Batman the Movie

Ocean

The first level of this game, while difficult, was engaging for one reason: not only did you get to play as the Caped Crusader, but you got to swing around on the batrope. It enhanced what would have been a very ordinary platformer. But from then on in, the game – a straight port of the CPC version – went downhill quickly with a sluggish driving section.



Barbarian II

Palace

While the first game was brilliant, this sequel suffered on the GX4000, not least because it was a straight port of the CPC version released around a year earlier. It took no advantage of the console's extra capabilities and in terms of gameplay it was once again a case of slashing monsters with your sword. Nice cover art, mind.

Switchblade

Gremlin

Playing as Hiro, you had to reassemble a sword smashed to bits by an evil dictator. Most of the action took place in underground caves – but what stunning looking caves they were! As you made your way through the game you had to beat up various foes using your martial arts skills. It was brilliantly detailed, featured a great control method and was perhaps the best game on the console.

Klax

Domark

Some people may yawn, but this was one of the better puzzlers. Like many GX4000 releases, it

few games being written, leading to a lack of people buying the GX4000, which in turn led to even fewer games being written.

GX4000 collector John King, who has set up a website listing all of the games he believes are available, said: "The GX4000's poor luck in the market was entirely due to a lack of good games and for this reason it deserved to fail. Amstrad should have ensured a supply of interesting and playable games prior to the release of the machine."

Xmas hangover

The post-Christmas sales report made for depressing reading. In France, sales were good and French publishers were confident they could shift around 20,000 units of each game. But in Britain, the garden was less rosy. By February 1991, the GX4000's price was slashed from £99 to £79 by Dixons and Comet. Although Amstrad had not officially declared the price drop, the fact it allowed retailers to take a greater slice of the profits after

The cartridge games certainly impressed Amstrad Action magazine, with a number of titles appearing in their top games of 1991 round-up

>Retro collector

As with all old consoles, eBay is the best place to get hold of the machine and its games. Depending on whether or not it is boxed, the consoles can be snapped up from between £10 and £50, and the cartridges generally go for around £8. In August 2004, a fully boxed cartridge version of Pang, complete with instructions, sold for an impressive £72. And a GX4000 including 15 games (one of which was also Pang) fetched £220.

One firm, the Shropshire-based Trade In Post, snapped up all of the Amstrad in-store demonstrators – around 200 of them – soon after the GX4000 was killed off. Trade In Post owner John Thackeray then set about dismantling them, taking the 12 cartridges out of each machine and selling them. For owners of the console, it was a perfect way of getting hold of the games, but as if to prove how unpopular the machine was, John says he still has dozens of the cartridges left and continues to put them up for sale.

He said: "I still have one of the demonstrators but all the rest of them were broken up for the cartridges. I sell them without boxes and manuals but I can't say I've sold any for a long time. I wasn't a fan of the GX4000 as I already had a 464Plus and a 6128Plus. As far as I was concerned, the GX4000 had nothing extra to offer." Among John's items for sale are No Exit, Operation Thunderbolt, Switchblade, Pro Tennis Tour, Navy Seals, Barbarian 2, Robocop 2, Klax, Pang and Plotting, all at £7.99. He also has some GX4000 consoles for sale.

Chris Weatherley, who has sourced most of his games via eBay, said: "It's very hard to find some games. If they exist, Spider-Man or Shadow Warriors must be the rarest titles. But of the ones I know exist for definite, Chase HQ, Mystical and Dick Tracy are incredibly hard to get." Malc Jennings added: "I think the rarest game on the console would be Pang by Ocean. It was one of the few games that warranted switching the console on for a quick blast. You'll find very few people are willing to part with that particular game even now. Robocop 2 is also quite hard to find these days and is easily comparable to the Atari ST version."

was pretty much identical to the CPC version, but at twice the price. Nevertheless, it was a satisfying Tetris-style game with coloured tiles cascading down a conveyor belt into a hole. The idea was to create rows, columns or diagonals of the same colour. It was fast, furious and fun.

No Exit

Tomahawk

This is one of the rarest titles to get hold of, but it really isn't worth it. It was a Street Fighter style beat-em-up with a strange scoring method. If you punched and missed your energy level went down. Horrible.

Tintin on the Moon

Infogrames

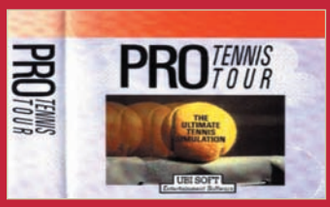
Tintin was a short game – and for that we can be grateful. Tintin saw the Belgium cartoon character defuse several bombs planted by Colonel Boris. It looked good but played incredibly poorly, being nothing more than a series of small

games bundled together. Unabsorbing, bitty and too easy.

Pro Tennis Tour

Ubisoft

There was not much to choose between this and the regular CPC version in terms of gameplay, but Ubisoft actually made an effort to enhance the graphics, using the GX4000's hardware sprites to create detailed-looking players. It showed off the console's capabilities and was an excellent offering overall.



Crazy Cars 2

Titus

Why oh why didn't the publishers

try a bit harder to create better games for the GX4000? Here we have a decent enough driving game where the only improvement over the regular CPC game was a little more colour in the sky. As for the game itself, you raced an Outrun-style Ferrari F40 around America while dodging various obstacles.

Pang

Ocean

One of the best games for the console and now highly sought after, Pang was simple, addictive and made owning a GX4000 worthwhile (as the game wasn't available for the standard CPC ›››

>Web resources

PCWKing

www.pcwking.netfirms.com/cartridge.html
This site run by GX4000 enthusiast John King attempts to keep track of all of the console's releases and rates them. There is also a scanned copy of the console's manual.

CPC Zone

www.amstradcpc.com
While not specifically covering the GX4000, this is a good stop for general CPC enthusiasts.

CPC Game Reviews

www.cpcgamereviews.co.uk
There is no specific cartridge section, but if you know the name of the GX4000 game you're looking for, then chances are there will be a review here and download links.

Trade In Post

www.tradeinpost.com
If you're looking for cartridge games and can't locate them on eBay, there's a selection at Trade In Post, a shop based in Telford. Games can be purchased online.

Christmas pretty much gave the go-ahead for cuts. At this point only Crazy Cars 2, Robocop 2, Fire & Forget II, Operation Thunderbolt, Switchblade, and Batman the Movie were available in the shops. Where were the rest?

Malc Jennings, editor of website CPC Zone, said: "Even when the GX4000 was released, it was hard for anyone that ever bought the machine to find games. I remember at school when we all swapped games for the CPC, Spectrum and C64 that anyone with the GX4000 looked severely annoyed and frustrated that those games just weren't in the shops. I think the GX4000 struggled because it was released at the same time as Sega's Megadrive, which of course was a 16-bit console and had amazing games like Sonic the Hedgehog to help promote it, not to mention far more money on marketing campaigns and a much bigger share of developers.

Poor sales over Christmas cast gloom over Amstrad even though its pre-tax profits for the last six months of 1990 were £40 million, a rise of £10 million. Sega and Nintendo's sales had rocketed and the GX4000 – as well as the Plus range of computers – lost serious ground to the two manufacturers it had desperately tried to beat. The only consolation was that Commodore's 64GS console had also fared badly and was also on the way out.

In Spring 1991, Amstrad axed 37 jobs at its headquarters in Brentwood. Among the big names to go in the internal shake-up was Amstrad's Software and Peripherals manager Peter Roback, one of the main men behind the GX4000 launch. By the Autumn, with only a handful of games released, cheap GX4000s were commonplace. Some high street stores were offloading stock for £30. The console had crashed and burned in spectacular fashion and Amstrad bailed out of the gaming industry for good. If the dream of a successful British console had been shattered by the non-appearance of the Konix Multi System, it died outright with the failure of the GX4000. RG*

computers). You basically blasted balloons which would then split into two, which in turn split again, and so on. It was hectic and fun.

Robocop 2

Ocean
This Robocop sequel blended great graphics, superb sound and gripping gameplay into a classic 2D platform game which saw you shooting at enemies and avoiding pitfalls. The one grumble was that dying meant you had to go right back to the start, but if other games of this quality had been released, the GX4000 may have fared better.

Wild Streets

Titus
In this game about drug gang warfare, you played James Taylor, a man with a pet panther and a 357 Magnum. The panther helped out when you were close to death, which was a novel twist, but otherwise Wild Streets was standard beat-em-up fare.

Op.Thunderbolt

Ocean
Great game, but sadly it was a lazy conversion of an old CPC game. The graphics were not up to the standard which console owners expected, but this Operation Wolf sequel still served up level after level of intense shoot-em-up action.

Plotting

Ocean
Another puzzle game but not up to Ocean's usual standard. The player had to match blocks together, watch them disappear and repeat. It was a cartridge only release so naturally made good use of the GX4000's graphics and sound capabilities.

Pinball Magic

Loriciel
Nothing can beat proper pinball but this went close. With 12 different tables there was lots to see, yet the game was so hard you probably wouldn't reach some of the later tables. It was another CPC port but well worth tracking down.

>Cliff Lawson interview

Cliff Lawson has worked for Amstrad for the past 20 years and was a key member of the team which launched the GX4000. We asked him a few questions about the console

Retro Gamer: Why was the GX4000 released as an 8-bit machine at a time when 16-bit was becoming the standard?

Cliff Lawson: It took longer to make the GX4000 and the Plus range of computers then had been predicted. By the time we launched the new machines, there were computers like the ST and Amiga which were showing what 16-bit CPUs could achieve. And we were still stuck in the 8-bit world. Admittedly, the GX4000 had hardware assistance, but the ST and Amiga had powerful sound and graphic support chips too.

RG: The biggest complaint at the time was the lack of software. Why was this so?

CL: Software is the one thing that can make a console a success and yes, the Amstrad failed in that respect. The GX4000 arrived in the same era as Nintendo's SNES and technically the Amstrad was at least as good. But to explain this properly you have to look at how the technically superior Nintendo 64 struggled against the first PlayStation, and how the Xbox struggles against the PS2 today, even though it is technically better. Amstrad's main problem was a lack of marketing budget. If you have millions of pounds and can throw the odd few thousand here or there to various software companies to persuade them to target software for your console, you will succeed. But the risk is that you have to run the entire console business at a multi-million pound loss, hugely subsidising it for the first few years until it gains a foothold. That's what Sony did and it succeeded, but a company as small as Amstrad, relatively speaking, can't do that kind of gambling. Having said that, the company did that with the e-Mailer phones, which made multi-million pound losses over the first two to three years, but are now making a very tidy profit.

RG: So did Amstrad have its hands tied or could it have done more to make the machine a success? Had it, in effect, given up too early?

CL: To make the console successful would have required more money to give software houses a greater incentive to create software. But the games and consoles needed to have been delivered sooner. And it would have helped if the machine had been 16-bit.

RG: Could Amstrad have done anything different? Perhaps used CDs instead of cartridges to make manufacturing easier and cheaper?

CL: Well, a PlayStation game comes on a 25p plastic disc whereas a GX4000 game came on about 30 dollars worth of silicon. Sony could launch games at £30, reduce them to £20 and then £15 or even £10 and still make a profit. Amstrad, and indeed Nintendo, could never heavily discount games because of the underlying cost of silicon. So maybe another mistake was to not include a CD drive. But back then a CD drive was about £150, so Amstrad would have had to heavily subsidise the hardware to include a CD – which brings us nicely back round to Sony and its marketing budget.

RG: Did Amstrad lose faith in the games industry?

CL: No. The firm continued to make quite a lot of money from the CPC. Remember the machines were actually more successful in France than the UK. But the fact is that the world was moving on. People either wanted a powerful business computer or they wanted to play games on a high-spec console. In the end, the Sony PlayStation delivered. Interestingly, Amstrad's marketing director left and became marketing manager for Sega.

RG: Did Amstrad ever think about re-entering the gaming market?

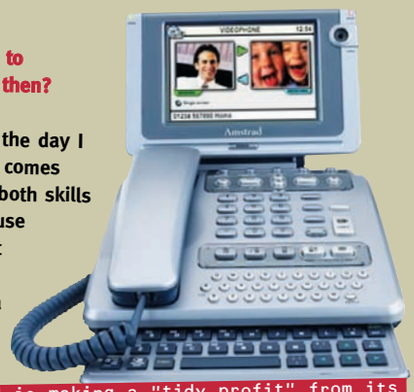
CL: At the time, Amstrad was selling business systems – PCWs and PCs – at a rate of about 10:1 compared to home computers and consoles, so it was clear, back then at least, where the money was to be made.

RG: What do you make of the console market today?

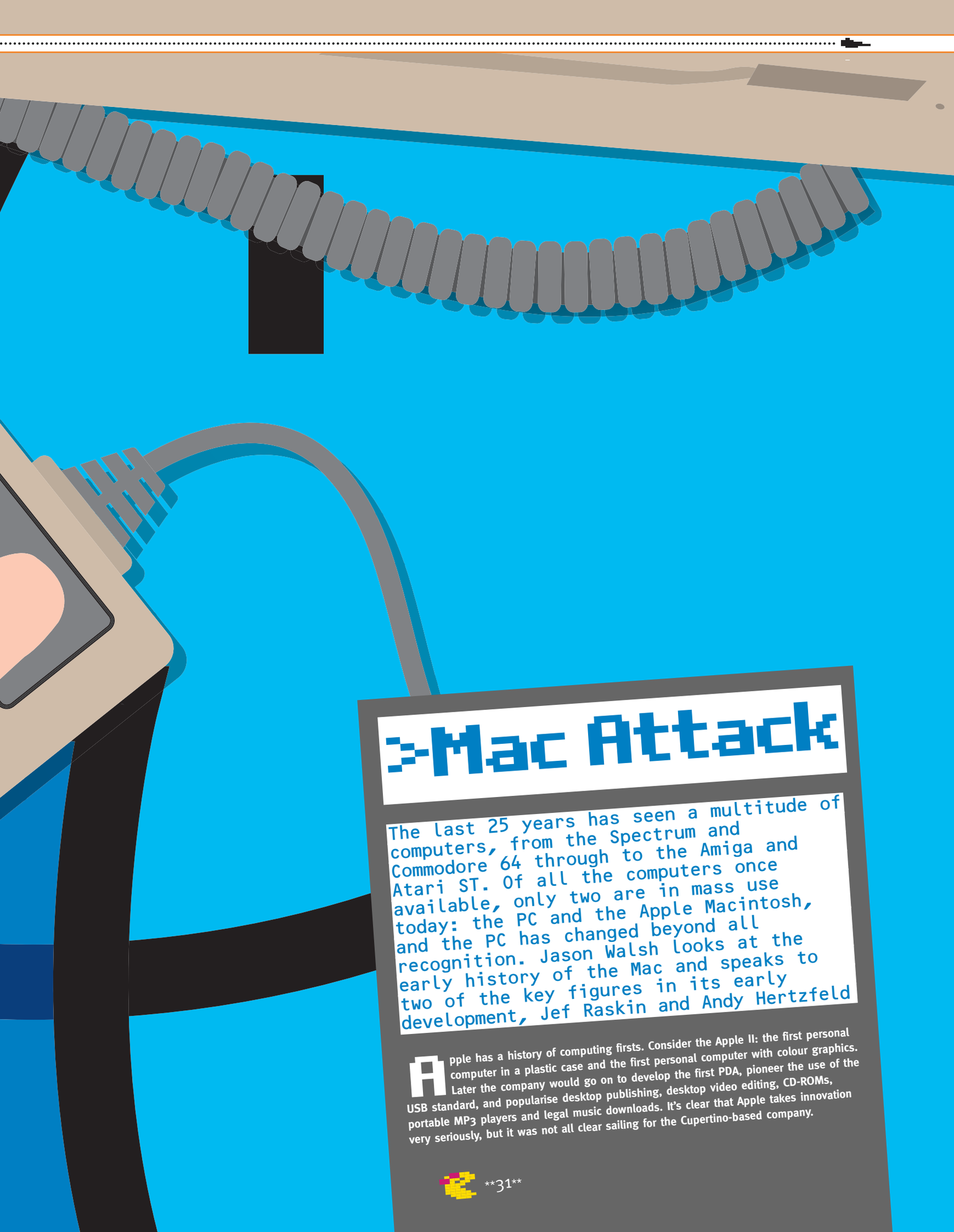
CL: Sony is the Microsoft of the console market and woe-betide anyone who dares to take on either of them in their respective domains. In fact, when you think about the Xbox, only Microsoft could have the balls and marketing budget to try and take on Sony at its own game, and yet they still can't succeed.

RG: It all comes down to marketing and money then?

CL: Yes. At the end of the day I think this whole thing comes down to marketing in both skills and budget. Just because someone has the most technically superior offering is in no way a guarantee to success.



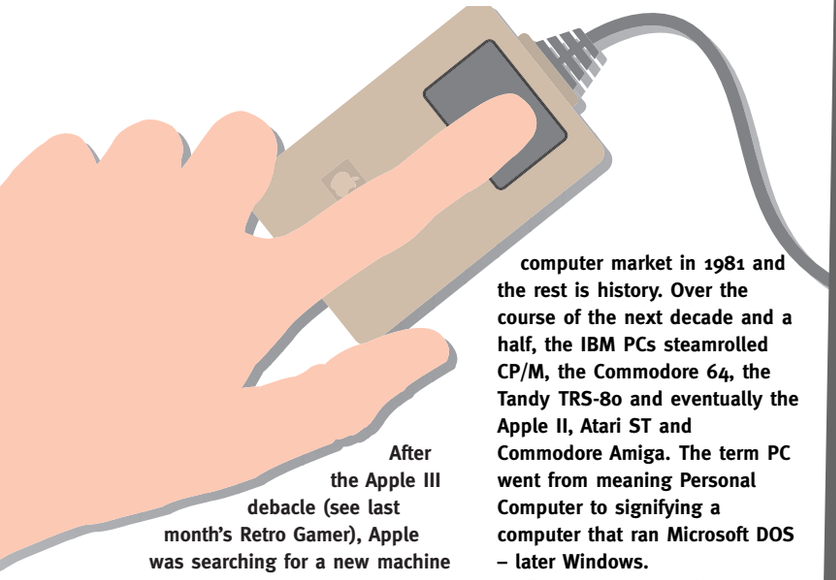
These days Amstrad is making a "tidy profit" from its range of email-enabled phones



>Mac Attack

The last 25 years has seen a multitude of computers, from the Spectrum and Commodore 64 through to the Amiga and Atari ST. Of all the computers once available, only two are in mass use today: the PC and the Apple Macintosh, and the PC has changed beyond all recognition. Jason Walsh looks at the early history of the Mac and speaks to two of the key figures in its early development, Jef Raskin and Andy Hertzfeld

Apple has a history of computing firsts. Consider the Apple II: the first personal computer in a plastic case and the first personal computer with colour graphics. Later the company would go on to develop the first PDA, pioneer the use of the USB standard, and popularise desktop publishing, desktop video editing, CD-ROMs, portable MP3 players and legal music downloads. It's clear that Apple takes innovation very seriously, but it was not all clear sailing for the Cupertino-based company.



After the Apple III debacle (see last month's Retro Gamer), Apple was searching for a new machine which would see off competition from IBM's PC and eventually replace its massively popular Apple II computer. Insiders at the company thought that the Apple Lisa, a revolutionary new 32-bit machine that would introduce an easy-to-use GUI (Graphical User Interface) to the public was it. History tells us two things: they were wrong about the Lisa, but they were right about the GUI. It was not the Lisa, but the Macintosh that was to be the first popular personal computer with a graphical user interface. Or as Apple itself put it, "the computer for the rest of us."

Fashion icon

Most of Apple's key engineers were engaged with the Lisa project. Apple believed that computers were too hard to use. The first word processors and spreadsheets had been a step in the right direction, but Apple's goal was to shift the personal computer from being a strange toy into a productivity device.

IBM first entered the personal computer market in 1981 and the rest is history. Over the course of the next decade and a half, the IBM PCs steamrolled CP/M, the Commodore 64, the Tandy TRS-80 and eventually the Apple II, Atari ST and Commodore Amiga. The term PC went from meaning Personal Computer to signifying a computer that ran Microsoft DOS – later Windows.

Even before 1981, Apple knew what IBM – and Microsoft's – strategy would be and it desperately needed to up the ante in order to survive. The answer was to be the Lisa. The Lisa was the first consumer computer with a graphical user interface. It had a mouse, a set of integrated office applications, and a 12in monochrome display which enabled users to see what their documents actually looked like on screen.

Meanwhile, Apple employee number 31 was already quietly working on a side project which no-one expected to go anywhere. The person in question was Jef Raskin, a former professional musician, professor of art and visionary engineer. Raskin actually conceived the idea back in the 1960s, but never had an opportunity to develop anything substantial. In January 1978 he joined Apple Computer Inc as the head of the company's publication unit. From there he managed to convince management that he had some ideas which were worth pursuing. "I avoided the supposed 'visionaries' in the company who could not understand my idea, but instead presented a business case," recalls Raskin.

He conceived a computer which would be simple in every sense – suited a limited range of tasks and was easy to use. He named it Macintosh after his favourite variety of tree-grown Apple, the McIntosh. Some claim he mis-spelt the name, for his part Raskin states that he changed the spelling to avoid confusion with the hi-fi equipment manufacturer.

Jef Raskin, creator of the Mac project, actually left Apple in 1981, three years before the machine came to market

>Design classics

The Mac has won countless industrial design awards, more than any other Apple product line, and Apple's products have a habit of winning design awards. The original Mac was a true design classic, but it very nearly looked quite different. Jerry Manock and Jef Raskin designed a machine that sat horizontally with a folding keyboard which could be lifted to cover the screen and disk drives for transportation purposes. In the end, this Mac design was only one of several competing designs, but all of the proposed models featured one similarity - they were all appliance-like 'all-in-one' units. The key concept as defined by both Jef Raskin and Jerry Manock, supported by Steve Jobs, was to make the machine as un-computer-like as possible. The Mac was to be a friendly machine and this was to be reflected in all aspects of the design, from the interface through the packaging to the fact that the machine was intended to be vaguely reminiscent of a little person sitting on your desk.

The original Mac model, with its classic compact design

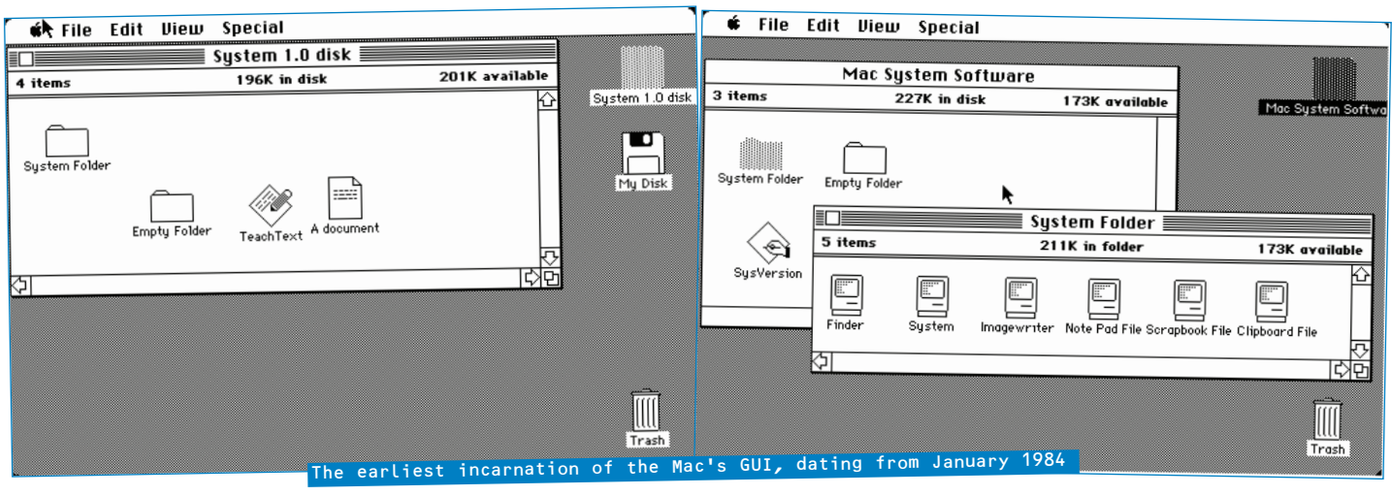
Jef Raskin is in this sense the indisputable father of the Mac. The fact remains however, that although Raskin created the Mac project, the machine which finally arrived in 1984 was rather different from the one which he initially envisaged.

Home invasion

Raskin's original vision, as outlined in the many papers he wrote on the subject prior to commencing, was not so much a computer as then understood, but a 'personal communications appliance' – a networkable box with keyboard and integrated monitor which would connect to the phone line and become "an indispensable part of every home". That last part of Raskin's vision has since echoed down the decades as the single most important premonition in modern computing.

Raskin toiled away with little in the way of help from the company – possibly just the way he liked it as it meant for minimal management-interference. But in early 1981 he was joined by two people who would go on to shape the Mac - industrial designer Jerry Manock and Apple co-founder Steve Jobs. By July 12th 1981, Jobs had effectively assumed control of the project and his vision of an easy-to-use multi-purpose computer supplanted Raskin's. At the time Jobs explained his vision by stating: "IBM has it all wrong. It sells personal computers as data-processing machines, not tools for the individual." Jobs had taken Raskin's vision and run with it.

Raskin is no stranger to controversy. His numerous run-ins with journalists, including recently with yours-truly in the Guardian, have often created furore in the Mac world. He has in recent months declared that "the Mac is a mess" and that "there is only a little difference between using a Mac and a Windows-machine." However, Raskin argues that his points are commonly misinterpreted and misrepresented. One example is



The earliest incarnation of the Mac's GUI, dating from January 1984

that many people believe that Raskin's Mac would not have a graphical user-interface and that he preferred a purely text-based interface. According to Raskin, this is not the case: "I designed it to be graphical from the ground up. But the text portions of the interface would have been cleaner. People have put together my dislike of the mouse, confusing dislike for a particular input device with dislike for graphic input devices in general, and my careful attention to text handling to create a false legend of my wanting a text-based machine."

When Retro Gamer caught up with Raskin's fellow Mac team member, Andy Hertzfeld, he confirmed that the suggestion that Raskin's Mac would have been text-based was incorrect. "Jef always favored a graphical interface. He didn't like the mouse, but he did like other graphical pointing devices." The confusion seems to arise largely from Raskin's next project, the ill-fated Canon Cat. The Cat is the Mac's demented brother – designed to do the sole task of word processing, but do it well. It is an interesting concept but it lacked the two factors which were central to the Mac's success: true ease-of-use and massive flexibility.

Hertzfeld, while not wanting to undermine Raskin's contribution to the project, is clear that the Mac of Raskin's imagination would not be the machine that so many know and love today. "If Steve Jobs hadn't gotten involved with the project when he did, the Macintosh never would have shipped at all, much less being around 20 years later." The implication is that Jobs, having worked on the Lisa, knew where he wanted the Mac to go and made sure that he had the engineers to fulfill his vision.

Raskin left the project in 1981. He had had a volatile working relationship with Jobs and was sent on an involuntary leave of absence from which he never returned. In those days the 'groovy' Apple wasn't in the business of sacking staff, so if the company wanted rid of someone it simply sent them on a permanent holiday until they got bored and quit of their own volition. Ironically, the same fate awaited Jobs a mere four-years later.

Nevertheless, the graphical user-interface is what separated the Mac from its competitors, such as the underwhelming early versions of IBM's MS-DOS-based PC. Neither the Mac nor the Lisa were the first computers to feature a GUI, but the Mac was the first to be a success. The Xerox Alto had a rudimentary GUI, and the Xerox Star had a more fully-featured interface, but neither proved a success as they were overpriced, unwieldy machines and their GUIs were difficult to understand – the oft cited genius of the Xerox project actually lies in its neworkability and the future which it pointed to, not its actual usability.

Despite this, a legend has arisen that Apple stole the GUI concept from Xerox. While Steve Jobs did indeed visit Xerox PARC where the Alto and Star were developed, the GUI in fact originates in computing research as far back as the 1950s and moreover, work had already began on the Mac and Lisa's operating systems before Job's visit to PARC. Apple no more stole the GUI than they invented it themselves - both stories are apocryphal.

Market reception

The Mac was launched on January 24th 1984. Jobs dubbed it "the people's computer." The Mac, with its near-unique point-and-click interface, was destined to make both technological and cultural history. The Mac inspired people in art, graphic design and architecture – the cultural and creative markets that would go on to form the Mac's key markets, later including photography, music and audio/video production. Suddenly it looked as though both Raskin's and Jobs's ideas made sense – computers were tools for users, no longer just office or laboratory-bound calculation devices.

A commercial was directed by Ridley Scott, the British director who had directed Alien and Bladerunner and would go on to work on Thelma and Louise and Gladiator. It was shown only once – during the 1984 Superbowl. Ted Friedman took up the story at the Society for the History of Technology Convention in Pasadena, California: "In the third quarter of the 1984 Super Bowl, a strange and disorienting advertisement appeared on the TV screens of the millions of viewers tuned in to the yearly ritual. The ad opens on a gray network of futuristic tubes connecting blank, ominous buildings. Inside the tubes, we see cowed subjects marching towards a cavernous auditorium, where they bow before a Big Brother figure pontificating from a giant TV screen. But one lone woman remains unbroken. Chased by storm troopers, she runs up to the screen, hurls a hammer with a heroic grunt, and shatters the TV image. As the screen explodes, bathing the stunned audience in the light of freedom, a voice-over announces, 'On January 24th, Apple Computer will introduce the Macintosh. And you'll see why 1984 won't be like 1984.'"

Then... nothing. The public didn't buy it. Everyone agreed that the battle of Apple versus IBM was an Orwellian struggle, but the Mac was not an overnight success.

Meanwhile the press raved about the computer, due in no small part to the fact that it simplified magazine and newspaper production. Be clear on this point – without the Mac revolution you wouldn't be reading this magazine right now because publishing would simply be too expensive for many of the multitude of titles we see on the newsagents' shelves today.

Hardcore computer hobbyists weren't interested in the Mac. Just as Jobs and co. had feared, they derided it as a toy, but there were other problems. Jef Raskin had planned on the Mac costing around US$600, Steve Jobs had aimed for US$1,500. When the Mac debuted it cost a staggering US$2,500. Business-users, always conscious of the bottom-line, were not impressed by the Mac's price-tag, even if it did make for savings in terms of time spent performing tasks.

Apple introduces Macintosh.
The computer for the bemused, confused and intimidated.
hello.
Macintosh's Personality.
THE SERIOUS SIDE
THE FUN SIDE
The first Apple you can carry in a bag.
If you can point, you can use Macintosh.
Soon there'll be just two kinds of people. Those who use computers and those who use Apples.
A typically straight-talking Apple ad for the Mac. As the slogan says, "If you can point, you can use Macintosh."

Nevertheless, the Mac had found a market in the creative industries and Apple built the user-base from there. Schools and universities picked up on the Mac's possibilities as a learning-tool, developing another key niche for the company. It was clear to anyone who cared that the Apple Macintosh was no ordinary computer; that it was, in fact, a potential democratic revolution in progress. For the first time a computer was designed from the ground up in order to allow the user to do actual things, not simply tinker with code or play games.

All the same, not everyone could see the genius of the Mac. Steve Jobs offered a free Mac to Andy Warhol, but he wasn't interested. Sadly it seems that Warhol was in fact the empty-headed and inchoate buffoon he seemed to be, rather than the reclusive genius many though him to be. With a Mac and a laser printer Warhol's experiments with repetitive and manipulated images, not to mention his questions about the authenticity of the individual art-object, would have been catapulted into another dimension. Meanwhile, Bo Derek also declared herself uninterested. She was a DOS-user. That Derek is one of the few celebrity supporters of George W. Bush suggests her radar remains somewhat off to this day.

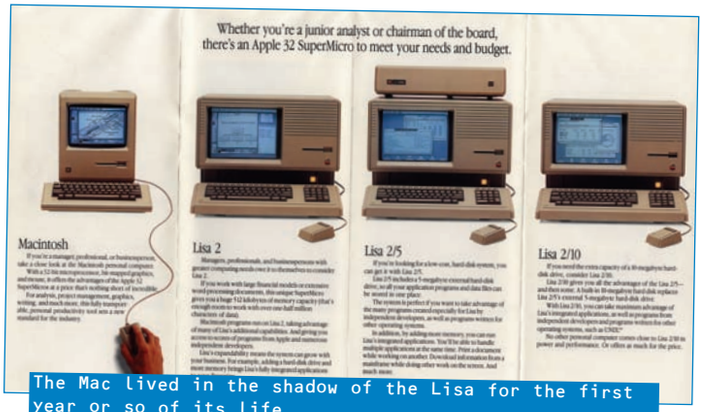
Some celebrities did, on the other hand, see the potential of the tiny wonder-machine, particularly comedians. Stephen Fry, Hugh Laurie and Eddie Izzard are all avid Mac users. On the music side of things fans include Moby, Fruitbat from Carter USM and Björk. Radiohead's album OK Computer even features a cameo singing role for the Mac's built-in Macintalk software voice synthesizer.

One infamous Mac-evangelist was the late-Douglas Adams. Adams enthused about the machines at every possible opportunity – converting the evolutionary biologist Richard Dawkins in the process – even writing columns for the UK's MacUser magazine, which is quite astonishing when you consider that Adams practically needed to be prodded with a hot poker to get him to write anything at all.

Colour Mac

In 1987 Apple's Macintosh made a great leap forward. By this stage Apple didn't have the GUI market entirely to itself. Microsoft was still plugging away with early versions of Windows, but more worrying competitors had appeared in the form of the Commodore Amiga and Atari ST. The ST in particular featured Digital Research's GUI named GEM (Graphic Environment Manager) which was a pale clone of the Mac operating system, lumped on top of the CP/M 68000 operating-system which Atari had renamed TOS. The worst part for Apple was that both machines featured colour graphics.

Apple knew that its monochrome Mac needed to be updated to deal with the threat

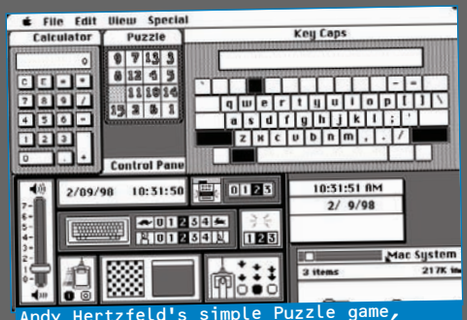

Whether you're a junior analyst or chairman of the board, there's an Apple 32 SuperMicro to meet your needs and budget.
Macintosh
Lisa 2
Lisa 2/5
Lisa 2/10
The Mac lived in the shadow of the Lisa for the first year or so of its life

>No stinkin' games

To this day the Mac is not known as a gaming platform and there's a reason for that. It's not that the Mac isn't a capable games machine – in fact, arguably it could be a better games platform than Windows, concentrating as it does on multimedia and graphics capabilities. These days the modern Mac even shares its choice of processor – the IBM PowerPC – with the Nintendo GameCube and Microsoft's upcoming Xbox 2. In the case of the Mac and Xbox 2, the PowerPC G5 is a fully 64-bit processor.

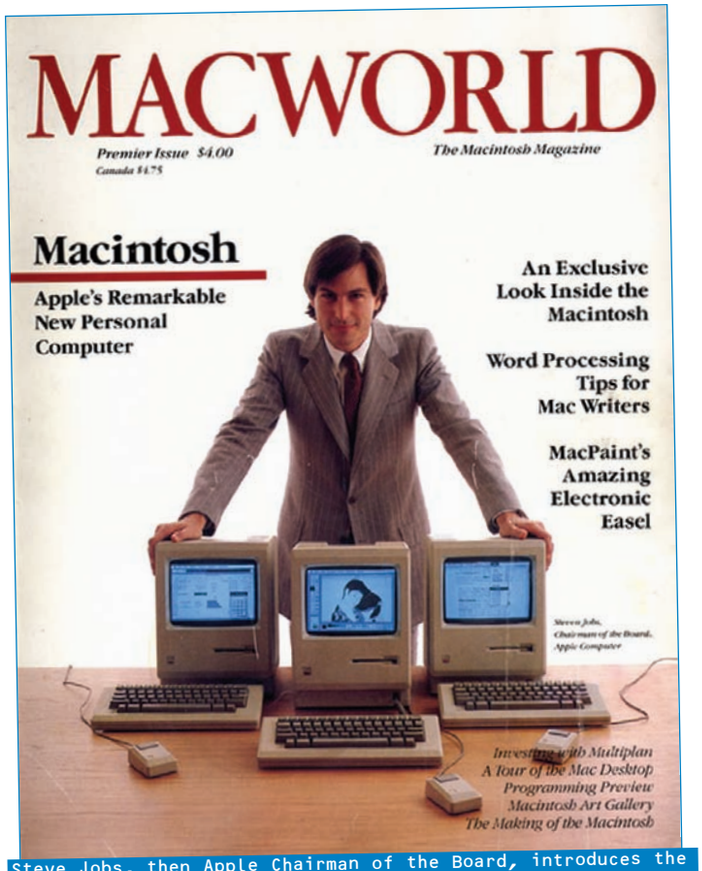
No, the reason the Mac traditionally doesn't have many games is that in the early days, Apple did everything it could to discourage developers from producing games for the machine. The reasoning was twofold. Firstly, Apple already had a home computer on the market – the Apple II. The Mac was aimed a professional users and Apple wanted to ensure that the Mac didn't take a bite out of the Apple II sales which had made Apple the fastest growing company in American history.

Secondly, although it's hard to see now, the Mac was a revolutionary machine and Apple was concerned about how people would perceive it. Apple-insiders were afraid that the public, particularly business and IT professionals, wouldn't understand the graphical user interface, instead seeing graphics as synonymous with games, therefore declaring that the Mac was unsuitable for business use. Nevertheless, games were developed for the Mac.



Andy Hertzfeld's simple Puzzle game, hidden among a wealth of desk accessories

The dubious honour of being the first-ever Mac game belongs to another of Andy Hertzfeld's efforts - Puzzle. Puzzle wasn't intended to be a true game, rather it was a proof of concept. Back in 1984 the Mac was a single-tasking machine designed to run one piece of software at a time. This was a design decision - multi-tasking was reserved for the more expensive Apple Lisa. Hertzfeld was dissatisfied with this and developed a series of small applications called 'desk accessories' which could be run concurrently, and share memory, with the main application. They were intended to be simple apps such as a calculator, control panel, keyboard map and notepad, but Hertzfeld pushed the concept a little bit farther. Puzzle was a simple sliding number puzzle-game. In the end all of his work paid off – a year after he left Apple in 1984 he wrote a multi-tasking upgrade to the Mac OS which Apple was happy to incorporate into the operating



Steve Jobs, then Apple Chairman of the Board, introduces the Macintosh on the cover of Macworld issue 1

>XL: eXtra Lisas

The success of the Mac was such that it totally eclipsed Apple's main project: the Lisa. The company tried again with an upgraded Lisa 2 in 1984, but finally gave up.

Eventually, on January 1st 1985 the Lisa was modified to run the Macintosh operating system and sold as a Mac fileserver named the Macintosh XL. XL was used to indicate 'eXtra Large', although insiders came to joke that it stood for 'eXtra Lisas'. On August 1st 1986 the XL was discontinued and the Lisa finally died. Apple dumped thousands upon thousands of unsold XLs and Lisas in a Utah landfill site.

The Apple Lisa 2/10 model, seen here, featured an internal 10MB hard drive. It was later modified and renamed the Macintosh XL

from these new 68000-based machines. In March 1987, Apple upped the ante with the release of the Macintosh II. Unlike the earlier all-in-one (compact) models, the Mac II was designed to be the ultimate expandable Mac. Based on the new Motorola 68020 processor, the Mac II included six slots allowing for a number of different expansion cards.

With the Mac II, Apple also introduced colour graphics to the Mac, further cementing its position in the design and publishing industries. Despite the fact that this was 1987, the graphics card could even be upgraded to display up to 16.7 million colors. The machine was an instant success and came with 1MB of RAM, an 800KB floppy disk drive and a 40MB internal SCSI hard disk drive.

Publishing software was the first area to make use of the new Mac's capabilities, but the game developers weren't far behind. By the time the 1990s rolled around Mac games were no longer the unique, quirky Mac-only efforts that had amused players, if not exactly set the world on fire. Mac owning gamers were soon able to play popular titles like Loom, Monkey Island I & II, Indiana Jones and the Last Crusade, Doom 2, Lemmings and Prince Of Persia.

system as, by this time, the Lisa had proved an expensive failure.

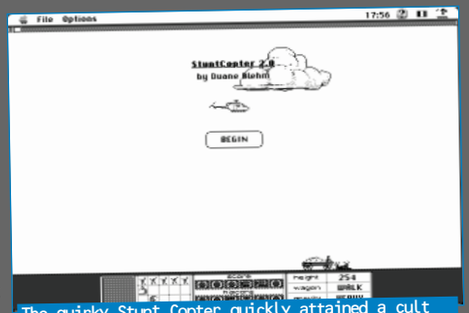
One game which explicitly fell foul of Apple's no-games policy was Alice. Developed by Apple staffer, Steve Capps, Alice was marketed by Apple itself. Or rather it wasn't. Apple's reluctance to promote the game aside, Alice was an intriguing concept. Based on the adventures of Alice from Lewis Carroll's Through the Looking Glass, Alice was an isometric-3D action game which was set on a giant chessboard. Apple eventually relented on its no-game policy and released Alice, but the title had to be changed to Through the Looking Glass in order to avoid confusion with a peculiarly named database program.

If you build it...

Other key early games on the Mac were LodeRunner and MacAttack. LodeRunner proved particularly popular with Mac-gamers, becoming one of the few platform games available for the system.

On the whole the Mac faired poorly when it came to action games, but strategy, war, adventure and role-playing games were a lot more popular. Sierra On-Line was an early supporter of the Mac- much to the chagrin of Apple IIGS owners who felt the company was ignoring their computer. Other early classics included the Ultima series and the intriguing point-and-click adventures from ICOM. Such a title was Shadowgate, a fairly typical dungeon adventure, but unusual in that it made use of the Mac's built-in GUI; something which had to be simulated when the game was ported to other platforms.

Outside of the commercial market – and quite possibly because of its lack of interest – the Mac developed a healthy shareware games scene. One of the most fondly remembered games is Stunt Copter. Laughably primitive by today's standards, it was a simple game even back then, but it developed a cult following. Programmed by Duane Blehm under the name Hometown Software, users controlled a helicopter with the mouse. The task was to drop stick-men (stunt jumpers) onto a hay cart being pulled by a horse – sort of Amish meets Thunderblade. But not quite.



The quirky Stunt Copter quickly attained a cult following, and has since been remade for Mac OS X

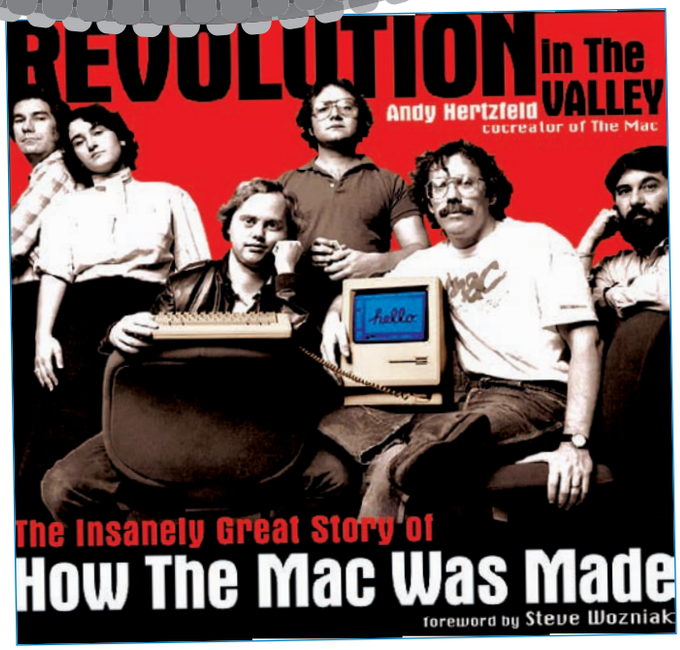
Duane died in the 1990s but his parents continued to receive a small, but steady stream of cheques from avid players. In order to honour their son's memory and please the game's fans, the Blehms released Stunt Copter as freeware. Around 2001, Antell Software released a version of the game for Apple's new operating system, Mac OS X.

Another shareware game which was played surreptitiously by schoolkids in Mac labs across the world was Social Climber. This peculiar game was a clone version of the VIC-20 classic, Wacky Waiters, for those with a penchant for a Marxist reading of society. ›››

The Mac versions of these games were popular and well-coded – they had to be. Unlike the Amiga, Apple used little in the way of custom chips. The Apple way is to do everything in software, and it's the software that is the reason the Mac is still with us today when so many competitors have fallen by the wayside. Not only was the Mac a vision of the future, it remains the most highly-polished computing experience possible today. The attention to detail is nothing short of staggering – if only there were more games...

For further reading we recommend Andy Hertzfeld's book, Revolution in the Valley: The Insanely Great Story of How the Mac Was Made, published in December 2004 by O'Reilly. The book features a foreword by Apple co-founder Steve Wozniak and traces the development of the Macintosh computer from its inception as an underground project in 1979 to its triumphant introduction in 1984 and beyond. In this vivid first-hand account, author and key Macintosh developer Andy Hertzfeld reveals exactly what it was like to be a key player in one of computing's most important technical achievements. RG*

The Macintosh II was not so compact anymore, thanks to its built-in 40MB hard drive


REVOLUTION in The VALLEY
Andy Hertzfeld
cocreator of The Mac
The Insanely Great Story of
How The Mac Was Made
foreword by Steve Wozniak

The shareware gaming tradition on the Mac continues to this day. One company in particular is renowned for its Mac games: Ambrosia Software. One series of games which has become so popular that it was even ported to Windows is Escape Velocity. Escape Velocity is familiar gaming territory. It's a space combat simulation with trading and mission features – sound familiar? Yes, it's basically a two-dimensional version of the BBC Micro classic Elite, and it's none the worse for it.

Mac Halo

What? Halo was a Mac game? That's right, it was. Sort of. The developer, Bungie, specialised in Macintosh games and the Mac-press was at the time abuzz with rumours of a new shoot-em-up game called Halo. Screenshots were leaked. Appetites were whet. And then Microsoft bought Bungie. The Mac version was put off for months on end and was eventually only released in an effort to placate Japanese Mac-fanatics who loved the game but were never going to buy a PC or, heaven forbid, an Xbox. In some sense at least, Halo is actually a follow-up to Marathon, an earlier Mac first-person-shooter. Marathon is a legend in Mac-circles and, rumour has it, is still played by the Retro Gamer art department during the lunch hour. Relatively primitive by the standards of Halo 2 or Doom 3, the Marathon series was leaps and bounds ahead of the original Doom games. Happily Bungie has released the source-code and the games continue to be developed by the open-source movement to this day. Common features in both Marathon and Halo include the Marathon logo embedded in the Halo logo, Hunters, and SPNKR rocket launchers.

Halo, the true successor to Marathon, eventually arrived on the Mac at the tail end of 2003

>Then & now

1984 Apple Macintosh

CPU: 32-bit Motorola 68000 running at 8MHz
RAM: 128KB, maximum 512KB
ROM: 64KB
OS: Mac System 0.91
Display: 9in 1-bit monochrome at 512x342 resolution
US Price: $2,500

2005 Apple Power Macintosh G5

CPUs: Dual 64-bit IBM PowerPC 970fx (G5) running at 2.5GHz
RAM: 512MB, maximum 8GB
ROM: 1MB
OS: Mac OS X 10.3.5
Display: Up to 30in LCD, 16.7 million colours at 2,560x1,600 resolution
US Price: $2,999

>Modern Macs

Our story ends in the early 1990s, but as everyone knows the Mac continues to this day. The 1990s were the best and worst times for Apple. During the decade the company massively increased its market-share - and then lost it again. It dabbled with PDAs, licenced Mac clones, changed processors, re-wrote the Mac OS countless times, released two versions of UNIX and in the end bought Steve Jobs's company NeXT Computer.

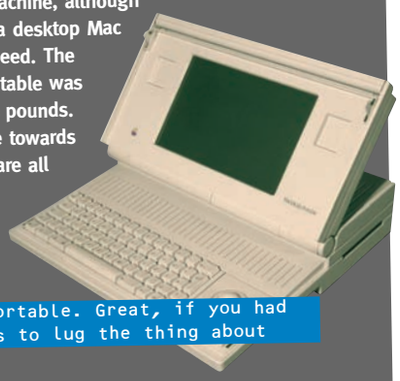
Then in 2001 the Mac changed forever. Steve Jobs unveiled a new operating system, Mac OS X. OS X was not related to the original Mac OS. Instead it was developed on concepts derived from the NeXTSTEP project which was brought to Apple when it acquired NeXT.

On the move

Arguably the most successful line of Macs is the laptops. iBooks and PowerBooks are Apple's crown jewels, but from the release of the original Mac in 1984, it took Apple five years to get its first laptop out the door and it was, well, disappointing.

The first PowerBook was released in 1991. Co-designed by Sony, it was an instant hit - the most powerful portable computer on the market and the first in a long line of PowerBooks - but this slender notebook wasn't the first portable Mac. That title belongs to the long-forgotten Macintosh Portable.

Released on the 20th of September 1989, the Apple Macintosh Portable centred on a 16 MHz 68HC000 processor and featured 1MB of RAM in a rather chunky off-white plastic case. The monitor was a surprisingly good 9.8in monochrome active-matrix display. The specs weren't the problem with this machine, although by then it was possible to buy a desktop Mac running at several times that speed. The problem with the Macintosh Portable was its weight: it weighed nearly 16 pounds. Nevertheless, it was an advance towards the laptop computer which we are all familiar with today and on the plus side, the lead-acid battery gave five to ten hours of use.



The original Macintosh Portable. Great, if you had the upper body dimensions to lug the thing about

>Key Mac apps

MacWrite and Microsoft Word

Word processors. How exciting. Yes, well admittedly they are a trifle dull, but both MacWrite and Microsoft Word have a place in computing history. MacWrite because it was the first WYSIWYG word-processor with multiple fonts, and Word, which stole its clothes, because it appeared on the Mac in 1984 - a full five years before debuting on Windows (the DOS application of the same name is actually unrelated).

MacPaint

MacPaint was many people's first GUI-based bitmap image editing experience, and as such became the seminal work by which later efforts were measured.

Pagemaker

First introduced in 1985 by Aldus Corporation, PageMaker was the first desktop publishing program. When combined with MacPaint and the then-new laser printing technology, Pagemaker spawned a publishing revolution that the Mac's been at the centre of ever since.

QuarkXPress

The application which set the standard in design and publishing and cemented the Mac's hold on the creative industries, Quark XPress was released in 1987. Pagemaker never recovered.

Photoshop

In February 1990, Adobe Systems Inc shipped version 1.0 of Photoshop. While by version 2.5.1 the application would also be available for Windows, today it remains the seminal bitmap graphics editor and central to many Mac-user's experiences. In fact, 1990 did not see the birth of Photoshop and the application was not developed by Adobe. Adobe bought it from the developers Thomas and John Knoll. Prior to Adobe's interest, the Knoll brothers had managed to sell two hundred copies of the software under the name ImagePro, as they had managed to convince BarneyScan to bundle it with its slide scanners.

Hypercard

Developed in-house at Apple by the legendary engineer Bill Atkinson, Hypercard was a peculiar application. Seen by most users, and marketed by Apple, as little more than a glorified address book, Hypercard was in fact a stack-based hypermedia authoring system which, in many ways, prefigured the World Wide Web. Interestingly, Myst, probably the most successful adventure game of all time, was actually coded in HyperCard.

From the word go, the Mac was home to many powerful business and productivity applications

eMag

>Desert Island Disks

Paul Drury chats with gaming TV celeb Violet Berlin, the latest castaway to contemplate a life of gaming on our desert island

>WHO?

Violet Berlin, presenter, writer and producer of numerous videogame television shows, including Bad Influence! and GamePad

Violet is taking this seriously. Even before I've sat down, she's trying to determine the exact criteria for what games she can take to her desert island and wondering whether to make it her Retro Island and not take anything post-SNES. She flirts with the idea of taking eight titles she's never played, as this may actually give her more pleasure than revisiting things past (something she confesses she rarely does – she doesn't own a single film on DVD for example). Then she worries whether she should take her favourite games or those that would be most suitable on an island, and discusses in some detail what might be involved in training up a team of monkeys to compete in multiplayer challenges...

Violet is clearly a devoted gamer. For nearly 15 years, she has been the face of videogames on TV. She has not only presented shows such as Bad Influence! and GamePad, she has been heavily involved in the scriptwriting, research and production of these and other game programmes. In the early nineties, she wrote weekly games reviews for the Observer Magazine and had a regionally syndicated column, which ran for four years. She has even starred in games, most notably Micro Machines 2, after being approached by Codemasters. "I agreed, as I'd loved the first game, but only if I could be the fastest computer-controlled character. They said I could be the fastest female character, only Spider could go quicker. It's probably my greatest claim to fame." As well as featuring in further sequels, her motion-captured movements were used in PC title Normality and bizarrely, her digitised form falls out of a suitcase in Peter Gabriel's typically understated entry into the world of videogames, Eve.

With such a history of involvement with videogames, how does she feel when people still ask her if she actually plays games and seem surprised that a woman is so passionate about gaming? Has she punched anyone recently?

"Yeah, people do still ask. I can't understand how they think I'd be able, or even want to, present and produce videogame shows for this long if I didn't love games. It would be like someone producing a fishing show that doesn't fish. But I do find it bizarre that gaming is seen as such a specialism – that you either *can* or *can't* play them; you either know or you don't know about them. It's so elitist, like a club."

And of course, it's been predominantly a boy's club from the beginning. Violet was one of only two girls that did Computer Studies the first year it was introduced at her school, but was profoundly disappointed that lessons seemed to focus less on using a computer and more on writing stories about what would happen if they took over the world. "I do remember standing next to a Space Invaders machine, really wanting a go, but being too shy. Arcades were full of teenage boys and they were pretty intimidating for an 11-year-old. I did play Game & Watches and some handhelds that my dad brought back from Japan, but I was a girl. Back then, you wouldn't have even thought about buying a Spectrum – that's the truth isn't it?"

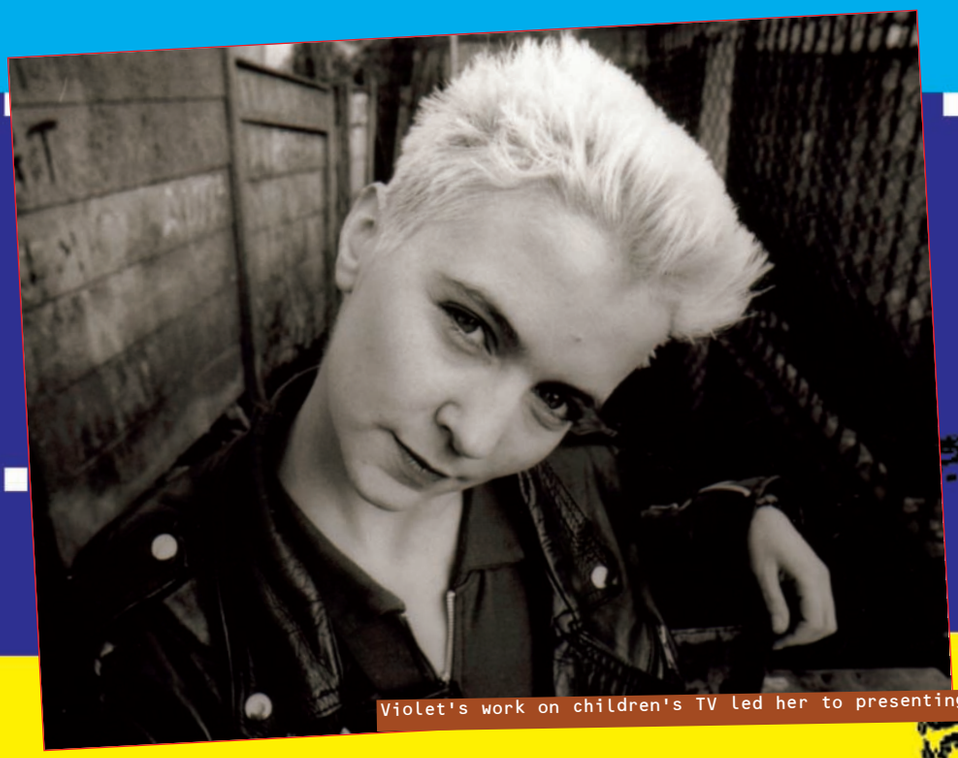
Even if young Violet had procured a Sinclair, it would have been rather futile, as her strictly Christian parents refused to have a television in the house. It's pretty understandable then, that during her teenage years in the eighties, gaming wasn't part of her life, though in an odd twist, she did end up doing a little programming. "When I was 15, I worked for a computer games designer who was doing a chess programme for the C64. He employed me to type in what he dictated and after a while, I started to see the patterns and shout 'I know what comes next!' So for a laugh, he'd let me complete lines of code."

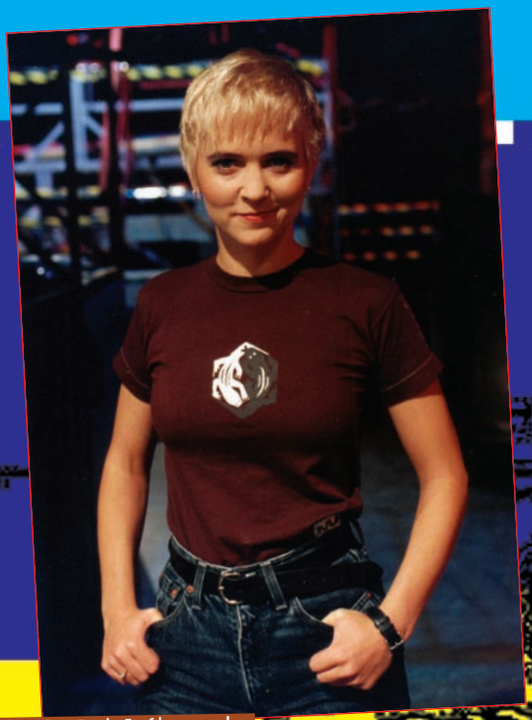
The Timmy Mallet experience

Just as odd, is that Violet managed to get a job on kids TV without ever having watched it, though considering her first break was on WacaDay, this might be viewed as a distinct advantage. I wonder just how annoying Timmy Mallet was in the flesh? "My first ever trip abroad for a shoot was with Timmy. It was in Austria, and on the first day he said 'I'll teach you to ski!' He took me to the top of a mountain and said 'See you at the bottom!'... I said I didn't feel ready but he was pretty insistent and he was my boss. I needed 10 stitches and had to be flown home. He was really nice to me after that."

Children's TV could be pretty painful without the intervention of Mallet's mallet. "It was a lot of hard work. 5am starts, when you'd been up till late the night before making the gunge. That's how hands on kids' TV is. Every team

Violet, left, aged 11 at school, and right, with madcap TV funnyman Timmy Mallet





Violet's work on children's TV led her to presenting ITV's Bad Influence!

had their own recipe." It did, however, lead to Violet presenting Cool Cube in 1990, a live three hour kids' show broadcast at weekends on BSB before it merged with SKY.

"Michaela Strachan tended to interview guests, and I'd take on the science bits, or stuff that needed researching. Another researcher called John said we ought to cover consoles as they were big with kids. '*You* can do it Violet'. I was given a NES by the director of the show and took it home with Castlevania. I was immediately hooked. I just loved it and arranged for a regular slot, which I think was the first regular games slot on British TV. It ran every week for a year. We had an ST, Amiga, NES and Master System and we'd get a bunch of kids to review games, with me presenting the item. But I needed to play all the games, so I knew what to ask them – kids aren't always very forthcoming..."

Violet's obsession with Castlevania, Mega Man, Zelda and the like, continued after she left the programme, and her friends in the media all knew her as 'The Girl Gamer'. So when there was talk of a new videogame show for kids on ITV, her experience of television and games made her an ideal choice to co-present Bad Influence! with Andy Crane. Did the fact she was a woman actually help this time? "Well, I can't believe there were that many other women back then that had my background in games. And Andy didn't play them. He was the Saturday Morning presenter of the day and was into techy stuff like pirate radio. There was a bit of geek in him. But apart from Columns on the Game Gear, he didn't play games. I was the gamer on the show, and until the second series when I got my mate Steve on board, who'd been the Deputy Editor at C&VG, I was the gamer on the production team."

Ah, so Andy was in fact the eye candy. I realise how that sounds, and quickly ask her about her favourite memory of working on Bad Influence! "I got to go to Japan for the launch of the N64. I was probably one of the first people in the UK to play Mario 64. It wasn't about being first though, it was just such a revolution. No one had an inkling of what was to come and within a second you could see it was completely amazing. And no one had seen a single clip. To report on that live was such a good feeling."

Violet smiles broadly, as if she can still feel the controller in her hand from that first magical time. The food arrives, and whilst we demolish an excellent curry, she tells me how Zoe Ball was a runner on Cool Cube and *really* wanted to be on TV, so Violet would write her in to the script as her lab assistant to give her a first break. Thanks Violet. She also met her partner, Gareth Jones, on the show, when he was starting to present How 2 (which he's still doing, 15 series later) and came on to do a piece. They knew each other for years (and readers may know him as elaborately coiffeured eighties Saturday morning presenter, Gaz Top), before getting together whilst working on The Big Bang for ITV. An appropriately titled show, as by the final series, they had their first son, Tycho (it's a crater on the moon you can see with the naked eye, in case you were wondering), who was soon joined by Indigo. I'm slightly disappointed to discover that whilst Gareth likes driving simulations, they don't tend to play games as a couple, but am heartened to learn that the boys have already been introduced to Super Mario World and Mario Paint on the SNES.

"You know, parenting is similar to playing god games. You create an environment and the little people have to fit in and hopefully thrive. And watching my sons learning to walk was a bit like watching someone working out the controls on a new game..."

Satellite of love

The couple have not only produced two young retro gamers, they have also produced GamePad together, which became the highest rated daytime show on Sky channel Bravo, with over three million viewers.

"I'd been presenting a show called Gamespot for Bravo, then GamePad. The first series had been made internally – I just turned up for links and voiceovers. Both were a huge disappointment. I thought it was such a shame, as I thought the channel would be perfect for a proper videogames show."

A successful pitch to the Head of Bravo lead to a further three series being commissioned, but this time made not by Bravo but by Violet and Gareth's own production company, WhizzBang TV. From then on, each series expanded its audience. Is she surprised at the success?

"No, not really. I know it's a good show and I know there's a demand for games on TV. And Gareth and I try to make it accessible as possible. I wish it wasn't repeated so much, though it has meant people still coming up to us a year after GamePad 4, not hardcore gamers, saying they've learnt amazing facts about videogames from the show. I'm an evangelist. We have the tagline for GamePad 'Made by gamers, for gamers' but there's more to it than that. I know gamers enjoy it, but it's for non-gamers too. TV is about *broad*casting, not *narrow*casting. I don't want people tuning in and find me talking about a load of stuff they can't understand. That's not what TV is about. And it's just rude..."

Violet says she would have preferred to have "no game reviews, more features and having fun with games", a philosophy clearly illustrated by the appearance of impressionist Phil Cornwall in series four and Little Britain star Matt Lucas reviewing Championship Manager. There was also plenty of retro content, including Jon Hare's take on Sensible Soccer and an interview with Jeff Minter.

"Whenever I make a show, I always think of the retro content, of how to cover the history. I was always looking for the right expert to present the retro bits and I don't think we ever got there. But I have plans for more substantial retro elements in future projects. Big plans."

Rough Diamond

Yet, sadly GamePad has not been commissioned for a fifth series, partly due to a new commissioner at Bravo and also, explains Violet, four series is about the natural lifespan of a TV programme. Instead, the channel is to air When Games Attack, presented by none other than arch rival from back in the day, Dominik Diamond.

"I loved the first series of Gamesmaster in the church, though I didn't watch it much after that. Everyone acted as if we were big rivals, but Bad Influence! was on ITV and got five million viewers and they got big figures for Channel 4, but back then it was a tiny channel. They were aimed at very different audiences. Our remit was to get as many girls as boys watching, whilst they could use sniggering humour. So, no, there wasn't any rivalry, though I know Dominik has always slagged me off in the press. I don't know why. I suppose it's his humour. He's been really quite nasty, which is odd, because when

BAD influence!
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Andy and Violet battle their way through the latest games
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Complete buyer's guide to games, computers, joysticks

Left, a Yorkshire TV promo pic with co-host Andy Crane, and right, the cover of Europress' Bad Influence! magazine

Left, with husband Gareth on ITV's The Big Bang, and right, presenting GamePad on Bravo

I've met him, he's been perfectly nice and normal."

We discuss the somewhat chequered history of games television and Violet is surprisingly upbeat, even finding something positive to say about Gamezville. "I find the presenters quite charming and likeable and even though people say they don't know much about games, so what – they're not secretive about that. I find it a bit dull, with all those challenges and cheats, but it's cheap and cheerful live kids TV."

Gamestars? "As a PR exercise for games, it's OK and I can see what the makers were trying to do, but I wouldn't normally watch that kind of brash awards show on any subject.' And how about Thumb Bandits? 'I love Aleks [Krotoski], she's brilliant and I thought the show was getting better. I really liked everything about it, except Iain Lee's humour. I think he just puts stuff down. I don't dislike him and I thought his documentary, Thumb Candy, was excellent. I just don't find him funny."

Finally, I wonder if despite not having a TV in the eighties, she's heard of Micro Live, and does she see herself as a Lesley Judd for the 21st century? She giggles. "I do know about it because the guy who came up with the idea of Bad Influence! was the producer and director of Micro Live. His running joke to me was always 'Lesley would have done that so much better.'"

Violet does identify a common problem with games on TV – that programme commissioners don't play games. 'It all comes down to it being seen as a niche. No channel has ever, or will ever, put a great deal of money into it, because they don't see it as primetime. This makes a lot of gamers feel insulted and neglected, but if there were a popular programme about games, they probably wouldn't like it because it would be too mainstream. I've got formats that I really think would break the mould of videogames programming and I'd love to be the one who really broke games on mainstream TV, but I don't think it will be me..."

She's being too modest. For someone who's carried the daunting mantle of 'The face of female gaming' for so long without being phased, someone who can banter with the hardcore, whilst knowing how to convey the simple joys of gaming to the uninitiated, she would surely be an ideal candidate. And of course, being easy on the eye doesn't hurt a career in television. I explain that whilst researching for this interview, several links popped up for 'pictures of Violet Berlin you might like', something that strangely didn't happen when I was preparing for Matthew Smith and Keith Campbell, and I wonder how that makes her feel?

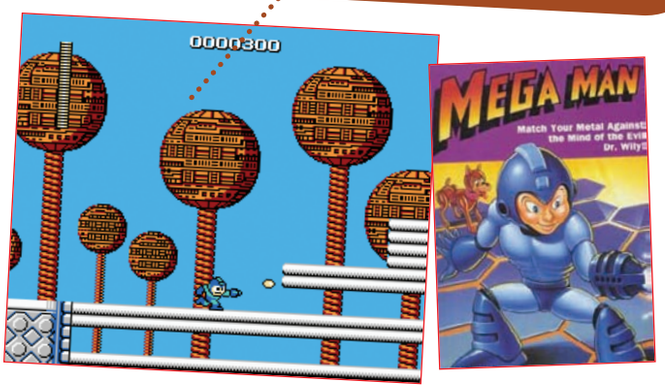
"Really uncomfortable", answers Violet. Then follows a suitably uncomfortable silence, finally broken when for the first time in the course of the afternoon, she struggles for words. "I dunno. You do your job and you don't really see how others see you... It's odd. I've done lots of games programmes, but I tend to be recognised by blokes in their twenties from Bad Influence!, saying 'I remember you from my childhood!' And I don't feel any older than them and it confronts you that you're getting older. The Grandma of Videogames..."

IMMIGRATION LARNACA
21 MAR 1995

Mega Man

NES, Capcom

I've still got to nail this game. Years ago, the original was an obsession with me, my sister and my boyfriend. Every day, we'd get home from work to our shared flat, and start playing straightaway. It required so much stamina that we took turns, each of us becoming a 'specialist' in defeating certain types of robot. The save points were so sparse, that overcoming the final gruelling challenges before getting to Dr. Wiley had to be undertaken in one long session, which would take us to the early hours of the morning. By this point we'd be so tired and psyched that we'd fail, and have to start all over again the next night, right from the beginning again. Mega Man 2 took us just two nights to finish, and we literally wept at the end, but the original remains undefeated.



Dr. Robotnik's Mean Bean Machine

Megadrive, Sega

I never had much time for Sonic games. The enemies were bland, and there never seemed much more to do than press right. But Dr. Robotnik's Mean Bean Machine isn't like that – it's a puzzler. I've made a pact with my mate Steve that we'll join the same old people's home when we're old and grey, just so that we can play this game together. For quite a long time in the mid-90s, it was our shared obsession. DRMBM channelled all your strategy and concentration, lining up falling beans in certain patterns which would cause extra mean beans to drop on your opponent's side of the screen. When this happened, the schadenfreude was immense. Even though it was best in two-player, I'd still take this to a desert island. There's always the single-player game, or maybe I'd find a monkey butler to train up...

Legend Of The Mystical Ninja

SNES, Konami

Action RPG, beat-em-up, side-scrolling platformer... the charm and surprise of this game isn't just in the mix of genres, but also in the plots and characters. (LOTMN also had a great two-player cooperative mode, so I'd better train that monkey butler well). However, the thing I loved most were the villages you could enter. Since the first Zelda game, I've been a sucker for games with villages, but LOTMN made more of its villages than most games as the little huts held a variety of sub-games, and you even took part in a bizarre quiz show. Nowadays mini games are common, and the sorts of games in LOTMN (like 'Paint' or 'Snake') can be found on every mobile phone, but LOTMN was a pioneer, and also delivered these simple diversions with a charm that hasn't been matched since.

Parodius

NES, Konami

Apart from a brief dalliance with a table-top battery-operated Space Invaders rip-off, my first true relationship with a proper shoot-em-up was with Gradius on the NES. It wasn't long after that I played Parodius, and I must admit that at first I wasn't aware that they were both made by the same company and that Parodius was a *parody* (ah, the penny drops!) of Gradius. I can't think why it took so long, as when I first played it, my eyebrows hit the ceiling. Parodius was my personal introduction to a particular kind of cheekiness that can be found in Japanese games and animé. It wasn't until years later – Day of the Tentacle on the PC, to be precise – that I found a non-Japanese game that made me chuckle as much. Parodius still brings a twitch to my fingers, and a smile to my face.

Lemmings

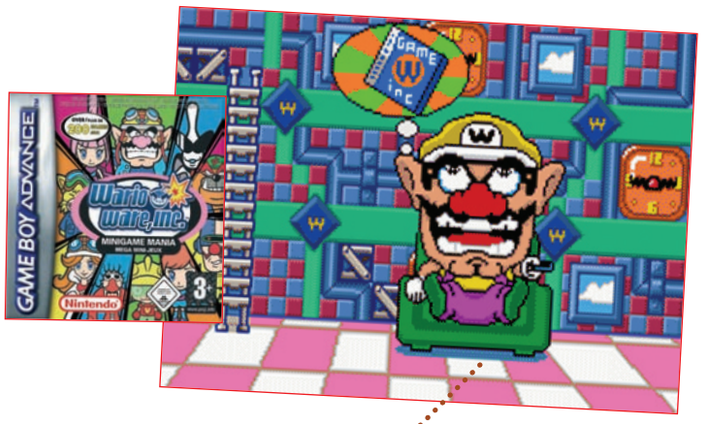
Amiga, Psygnosis

It's the start of the 1990s, I'm in my early 20s, and I've gone to stay with my best friend and his skinny Italian flatmate in the recently de-walled city of Berlin. Their company is great. The city is renewed, exciting – decadent, even. But here's the catch... they've got a game I'd never played in their flat, called Lemmings. "Oh no!" (as those little green masochists so love to cry). I think I spent the entire holiday in front of their computer – although, to be fair, they did too. At the end of the week, I felt that an obsession with Lemmings wasn't compatible with an even *close* to normal life, so like the holiday romance that it was, I've steered clear of the game since. I always vowed, though, to come back to it one day when I had infinite time.

Miracle Piano Teaching System

NES, Software Toolworks

A bemani game before the word 'bemani' had been invented, trademarked and marketed; this came with the only controller in history heavier than Steel Battalion – an actual electronic keyboard. The PC version was serious, and a bit dull. The NES version however, was tremendous fun – joyous, even. The easiest way to describe it is 'Duck Hunt with a piano', but that probably doesn't do the job very well either. The whole kit is currently in my loft, and I'm in the process of making space downstairs, so I can start my sons on it as soon as they're prepared to look at something other than Mario Paint. Sometimes I worry that this won't be as fun as I remember it, but at least it means I'll have a musical instrument on my desert island.



Wario Ware

GBA, Nintendo

I originally decided to be cast away to my own personal retro island, taking nothing from the PSone era or beyond. However, I'm afraid I can't help but make Wario Ware my one exception. The real reason is that I can't bear to be without it. My official excuse to myself, however, is that each micro-game provides a memory, a glimpse, a whiff, a tribute, or a parody or even just a 'sense' of a classic gaming moment. The little handheld cartridge is a giant of a game that itself stands on the shoulders of giants, and doesn't forget to acknowledge them. Sorry if that sounds pompous, but despite years of talking about games, I'm lost for words when it comes to Wario Ware. I think its greatness can only be described with a look, a silent moment of understanding between gamers.

Micro Machines 2

Megadrive, Codemasters

How could I possibly leave Micro Machines 2 behind? It's an utter classic – this sequel surpassing even the mighty miniature racing original. But there's a more personal reason for my attachment, as I'm also one of the characters in the game. I still get emails asking if Violet in Micro Machines is really me, and oddly enough the answer is 'yes' (I've got my original contract with Codies to prove it!) Of course there are plenty of other reasons to love this game, including the fact that it comes on one of those clever J-Cart thingies so it has two extra controller ports of its own built into the actual game cartridge. In other words, if you add a multitap, you can race against up to seven other players. That's a lot of monkey butlers to train up...

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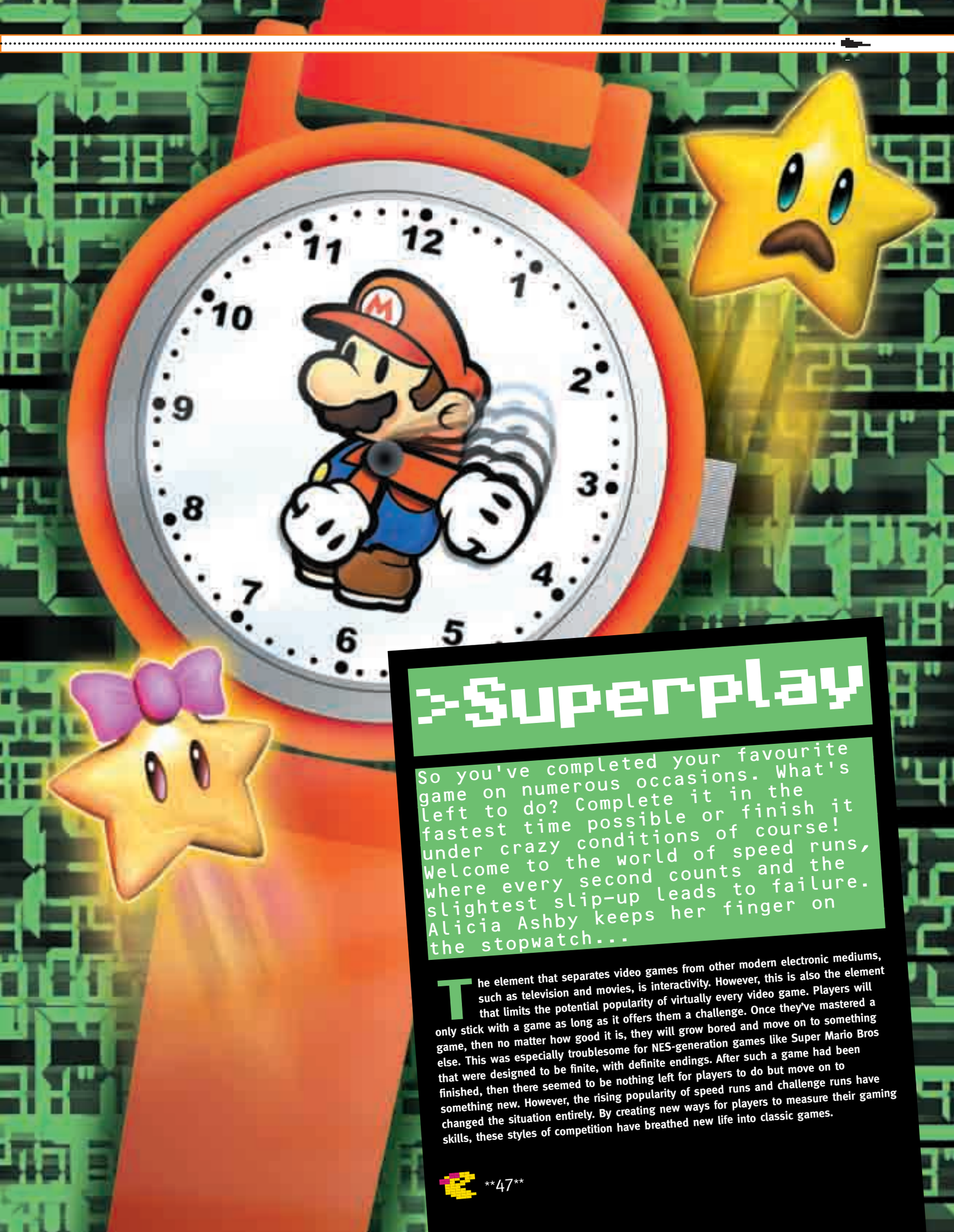


>Superplay

So you've completed your favourite game on numerous occasions. What's left to do? Complete it in the fastest time possible or finish it under crazy conditions of course! Welcome to the world of speed runs, where every second counts and the slightest slip-up leads to failure. Alicia Ashby keeps her finger on the stopwatch...

The element that separates video games from other modern electronic mediums, such as television and movies, is interactivity. However, this is also the element that limits the potential popularity of virtually every video game. Players will only stick with a game as long as it offers them a challenge. Once they've mastered a game, then no matter how good it is, they will grow bored and move on to something else. This was especially troublesome for NES-generation games like Super Mario Bros that were designed to be finite, with definite endings. After such a game had been finished, then there seemed to be nothing left for players to do but move on to something new. However, the rising popularity of speed runs and challenge runs have changed the situation entirely. By creating new ways for players to measure their gaming skills, these styles of competition have breathed new life into classic games.

A speed run is a style of competition where the goal is to complete a game in the shortest amount of time possible. While speed runs using modern games are certainly popular, the most impressive and heavily contested titles are usually for classic games from consoles like the NES, SNES, and PSone. This is probably because gamers have had years or even decades to master their playing skills and memorise maps when it comes to classic games, but for modern games players may have only had months to familiarize themselves with what the game has to offer.

The idea that beating a game quickly indicates a higher level of skill is inherent in the design of many classic games, such as Metroid for the NES. Finishing the game in less than three hours rewards the player with the revelation that the hero, Samus Aran, is actually a heroine. Finishing in less than one hour doubly-rewards the player by turning Samus's leotard into a much skimpier bikini.

Challenge runs are a similar sort of competition, not yet as prevalent as speed runs but growing in popularity. A challenge run requites a player to achieve some objective in a game, usually finishing it, without using certain power-ups. Doing so is a demonstration of both masterful skill and patience, as learning how to progress in a game with minimal power levels will require many sessions of intense play. The basic idea behind the challenge run doesn't appear regularly in game design until the PSone generation, where titles like Resident Evil and Metal Gear Solid would penalize a player for relying too heavily on certain items and game features, so the idea has yet to gain the popularity with classic titles that speed runs have. However, its popularity is growing due to how extremely challenging it is to finish most classic games without fully exploiting all of the resources made available in the game.

The Internet has done much to popularise speed runs and challenge runs, often by giving gamers who are still interested in old titles a medium through which they can communicate with each other and post media files of recorded gameplay. The Internet also makes it possible to play classic games without actually owning a system at all, thanks to the many emulators which are available to freely download. While the legality of using ROMs is debatable, they remain perhaps the most popular way of replaying classic games.

However, the popularity of ROMs poses a serious threat to competitions involving classic games. While they make games very easy to obtain, the emulators often possess a lot of features that the original consoles did not. Players can often save their progress through any game at any time, even during mid-jump in a platformer like Mega Man 2. Speed-altering controls can be used to slow down or greatly speed up the pace of a game, allowing the player to alter the original difficulty curve. Perhaps most troublesome of all, though, is the fact that clever programmers can hack ROMs of classic console game as easily as any other sort of program, and then alter the game however they please. The effect of a skilful ROM hack can be very similar to using a game manipulation device like an Action Replay or Game Genie, but infinitely more precise. Some emulators even come with hacking features built-in, which potentially allows any player to begin hacking their ROMs, granting themselves infinite lives, money, and other power-ups.

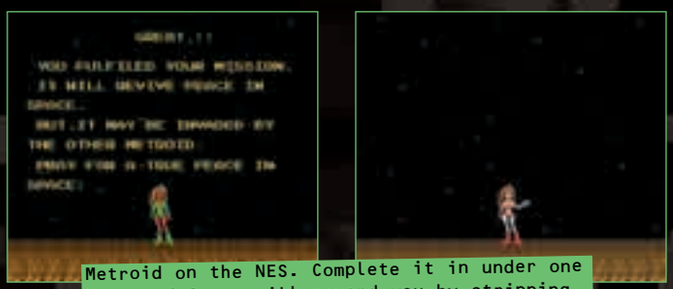
This feature of games played through emulation throws the authenticity of any speed run or challenge run played on a ROM into doubt. Usually players who wish to prove that they completed a certain speed run or challenge run will use videos or screenshots as evidence, but footage produced on an emulator can be manipulated in any number of ways and still appear to be legitimate. One particularly famous 'faked' speed run video of this sort involved finishing Super Mario Bros 3 in just over 11 minutes. It was produced as a demonstration, but ended up being widely circulated on the Internet. Just from viewing the video, there was no way to know that the player was relying on the careful use of save states and glitches. The player also admitted to assembling the video from footage taken in several different playing sessions to help create the appearance of a perfect run through the game. While such a speed run video is entertaining, most players would agree it's hardly a legitimate demonstration of gaming skill. The open nature of the Internet makes it all too easy for such faked demonstrations to circulate, often mislabelled. In such cases, there is simply no way to tell the difference between fake and legitimate speed run footage.

Emulators like Snes9X feature built-in cheat options, throwing any recorded speed runs into doubt

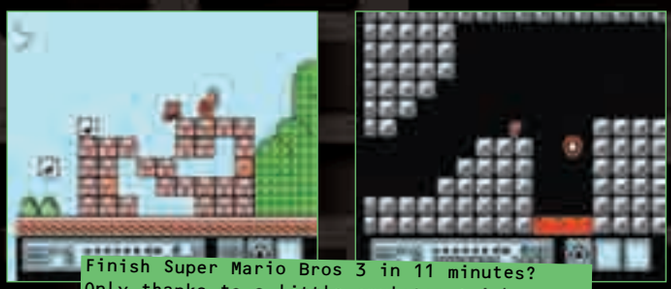
Galaxy quest

Fortunately, there is an organization that acts as the official arbiter for all sorts of video game world records, including speed runs and a few challenge runs. Twin Galaxies opened in Ottumwa, Iowa as an arcade in 1981, boasting 22 games. The founder, Walter Day, began to develop an intense interest in the upper limits of human gaming skill. So, during the summer of 1981, he began traveling throughout America, searching for arcades and gathering high scores from players across the nation. When approached by a player about beating a high score that had been published in a recent Time magazine feature about the then-new video game fad, Day cooperated and went on to watch the player rack up an astounding 24 million points over 24 hours of play in the arcade title Defender.

After the session was over, he attempted to find out if the player had set a new world's record with his high Defender score, and found that there was no agency that officially kept track of world's records in video games. Using his collected



Metroid on the NES. Complete it in under one hour and Samus will reward you by stripping



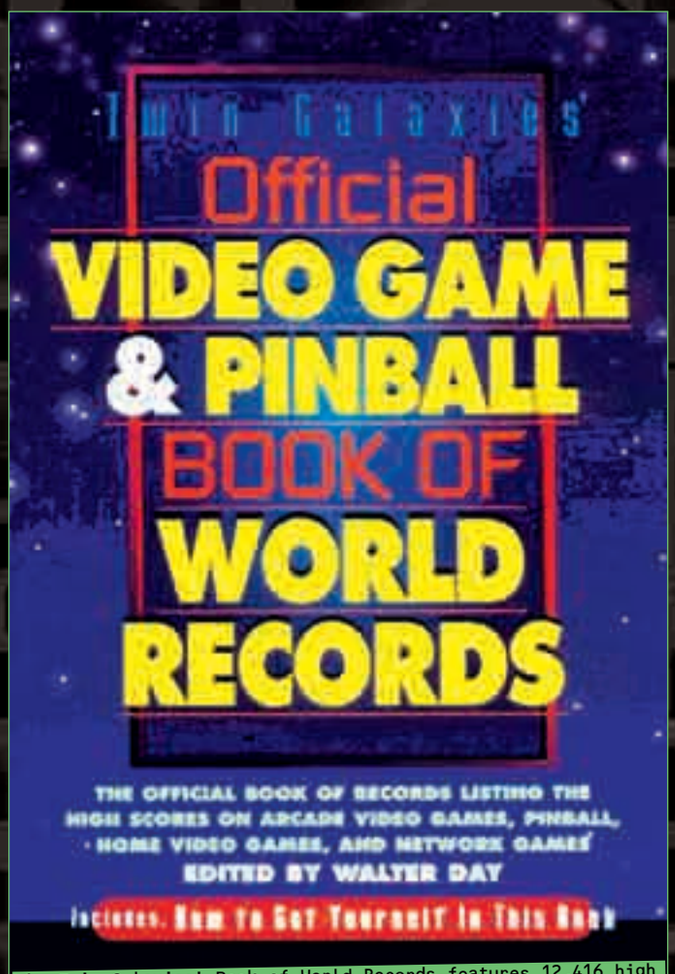
Finish Super Mario Bros 3 in 11 minutes? Only thanks to a little emulator trickery

Walter Day, founder of Twin Galaxies, an organisation that has been verifying videogame achievements since 1981

scores as a basis, Day took up the duty of record-keeping and announced the high score in Defender as the official world record. Ever since, the authority of Day and Twin Galaxies as record-keepers for videogame achievements has remained unchallenged.

The games that were popular during this first boom period for videogames were essentially open-ended. Players in arcades would battle on until their lives expired, and the games were obviously designed with the programmers assuming that every player would eventually get caught by a ghost or eaten by a centipede. While some extremely skilled players mastered particular games to the point where they could play them until they crashed, the end result was still the same. After a certain point, early games just ran out.

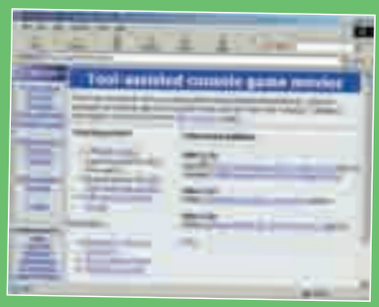
This design trend was short-lived, however, and soon games began to emerge with set goals to reach. While most games continued to record points, the true measure of skill in the minds of gamers became finishing the game. This created a problem for keeping records, since all players who finished a game finished it equally. There seemed, for many years, no way to differentiate between the level of skill with which different players would finish the game. The emergence of speed runs was the inevitable response to this dilemma. While many people could finish Super Mario



The Twin Galaxies' Book of World Records features 12,416 high scores from players in 31 different countries

>Web resources

http://www.twingalaxies.com
It's been mentioned before, but it bears mentioning again. This is *the* website to go to in order to find out who the world record holders are for just about any game title you can imagine, and there's a host of other interesting information kept on the site, too.



http://bisqwit.iki.fi
These videos aren't speed or challenge runs, but time attacks – videos made to show off the full capabilities of what someone using an emulator can do while playing a game. Videos hosted on this site are meant to be viewed using emulation software, but cover a wide range of classic NES titles.

http://home.comcast.net/~arcthelad
This is an archive links to a wide variety of videos, including speed runs and challenge runs. Some link to Bisqwit's site, while other footage is in video formats like .avi and .mpg. Fortunately, a handy links section will help you download everything necessary to view the archived videos. As with Bisqwit, most of the titles covered are classic NES titles, but some more modern Nintendo titles are also covered.

http://speeddemosarchive.com
This is Planet Quake's speed run archive. The default page focuses on the classic PC title Quake, but clicking the 'other games' link will take you to a page that lists all the other speed runs files that are hosted. The site tends to focus on newer titles than Arcthelad's page or Bisqwit, but for the most part they're still classic titles. The archive includes a stunning Super Mario Bros. speed run by world's record holder Trevor Seguin.

www.vortiginous.com
Hosts a small but fascinating collection of videos in DivX format, including some truly impressive SNES speed runs. Also includes some speed runs for NES and more modern consoles. Many of the files on this site are unique and can't be found elsewhere.

www.metroid2002.com
Huge Metroid fan site, which includes speed run videos in .avi and .mpeg format for virtually every entry. Files hosted include Jonathan Fields' world record Metroid II run and Scott Kessler's world record Metroid run.

Commendable achievements are listed on the site, such as the news that a British gamer has recently broken the Galaxians high score world record

Bros and rescue the princess, fewer could accomplish it without spending a lot of time on achieving that goal.

Day doesn't remember exactly when Twin Galaxies began to record speed run times for certain games as well as high scores, but estimates that it was within the past two to three years. There are some precursors to the speed run explosion that predate that period, but not many. The US Nintendo Power magazine began challenging players to complete games in record times in the early 90s, and published the names of players who proved they'd met the challenge in the magazine. Beginning in 1998, a website called Planet Quake began hosting downloadable videos of speed runs, but only for the original Quake game. Most major sites that archive videos of speed runs for classic games appeared within the two-to-three year period that Walter Day mentioned. It seems that speed runs were simply an idea whose time had come, and in a big way.

Vidi well

While some sites like Bisqwit specialize in archiving videos that are primarily meant to be watched on an emulator, Twin Galaxies does not consider a session played on an emulator to be a legitimate speed run, and does not archive videos. Instead, it asks players to play a session on an actual console and videotape the proceedings. Then the player is to copy the tape and submit the copy along with an information form requested from Twin Galaxies. The tape and form are reviewed, and if the entry is deemed legitimate, the score will be added to Twin Galaxies' official database. Twin Galaxies will also accept videos that are recorded on a PC using capture software, provided the player specifies the codec used and records all of the menu selections used to initiate gameplay. If an accepted score is a new world record for a major game, then Twin Galaxies will usually announce the new record on its website and with a press release.

Most of the records on Twin Galaxies are for high scores, but the number of speed runs is increasing as more gamers revisit titles from the late 80s and early 90s. The world record for very popular NES titles like Super Mario Bros, Ninja Gaiden, Metroid, and Bionic Commando are hotly contested, and some SNES titles like Legend of Zelda: A Link to the Past are also the subject of fierce competition. Challenge runs are acknowledged primarily as part of the conditions of recognizing any speed run record. Most speed runs are split into different categories, such as 'minimalist', 'complete', and 'out of the box'. The categories indicate how freely the player can make use of power-ups and short-cuts, and tend to require very different styles of player. A look at the different records listed for the PlayStation's Resident Evil (Director's Cut) and Resident Evil 2 give a good example of how challenge runs figure in to the official records. By far the most dramatic record listed is Mike K. Morrow's completion of Resident Evil (Director's Cut) in a little over an hour using Jill and the least efficient weapon in the game, the Knife. Other records allow any weapon to be used, but specify which character was used for that particular record.

Twin Galaxies does not offer rewards for world record holders, and neither do most other sites that host speed run and challenge run videos. For players, the reward is both in the glory that comes with having their skills recognised, and the satisfaction of achieving a difficult goal. Walter Day believes the recent explosion of interest in NES-era games, which had been all but forgotten as little as five years ago, may be mostly due to the rise of the speed run and challenge run mentality. It is certainly a dominating topic on many Internet forums dedicated to the subject of classic games, and some forums are appearing that are entirely devoted to speed runs and challenge runs for all sorts of video games. The open nature of the challenge invites virtually all gamers with a computer and an Internet connection to participate in the phenomenon.

Although classic gamers love their old games, there always comes a time when even the best titles feel like they've been played too much. Although the challenge a game with a finite ending can offer on its own is limited, the prospect of competition with other players can break that boundary. Fighting for bragging rights and recognition gives classic gamers a wonderful reason to keep their old consoles in good shape and pick up their favourite old games to see if they're merely good, or one of the world's best. In the process, a lot of old games may begin to feel new again as players try to push the boundaries of what the programmers thought was possible. RG*

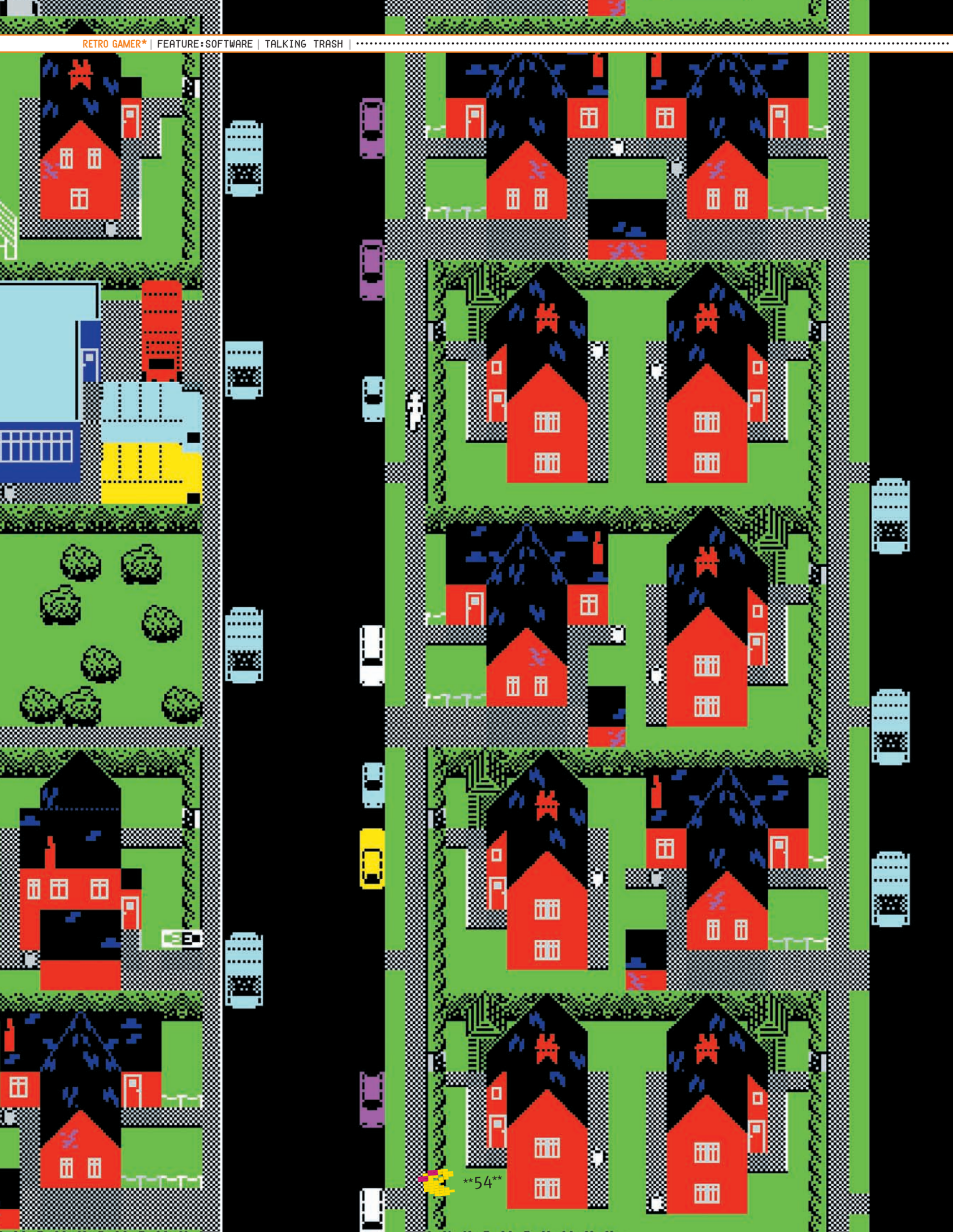
Do you think you could complete Resident Evil in just over an hour using only a puny knife?

>World records

How do your skills measure up against those of the world's best gamers? Here are some of the most amazing speed run records for Nintendo consoles, courtesy of www.twingalaxies.com

System	Title	Completion time	Special conditions	Completed by
GameBoy	Metroid II	01:11:00	None	Aaron Halvorson
GameBoy	Metroid II	01:15:11	Must get every item and kill all bosses. Manual timing starts as soon as you gain control of Samus to begin the game, and ends the moment the screen freezes when you enter your space ship to end the game.	Jonathan Fields
NES	Castlevania	00:14:26	TGTS settings (3 lives to start, 5 lives maximum). Timer begins when you hit the start button on the title screen and ends when you register the final blow on Count Dracula in his final form.	Tom Votava
NES	Castlevania II	00:54:33	Factory default (3 lives only, no continues or passwords allowed). Timer begins the second you hit start and ends when you lay the final blow on Dracula. You must clear all the mansions!	Mike K. Morrow
NES	Metroid	00:22:21	Factory default (1 life only, no continues or passwords allowed). Timer starts upon hitting the start button at and ends when Samus steps on the final elevator and loses control.	Scott Kessler
NES	Super Mario Bros	00:21:33	Fastest full completion. TGTS settings (3 lives to start, 5 lives maximum). Timer starts the instant you hit the start button and stops the instant you touch the golden axe in the final castle. All 32 levels must be completed! You may only use a warp pipe when it is essential to continue.	Cam Allen
NES	Super Mario Bros	00:05:10	TGTS settings (3 lives to start, 5 lives maximum). Timer starts the instant you hit the start button and stops the instant you touch the golden axe in the final castle.	Trevor Seguin
NES	The Legend of Zelda	00:34:05	1st quest (1 life only, no saves allowed). The timer begins when you hit start on the title screen and ends when you touch Zelda.	Tom Votava
SNES	Super Mario World	03:08:34	Must get all 96 exit gates. Start with 5 lives, no life limit and no continues. Timer begins when you press start to choose '1 Player Game' and ends when you deal the final blow to Bowser.	Kelly R. Flewin
SNES	Super Mario World	00:11:09	Fastest full completion. Start with 5 lives, no life limit and no continues. Timer begins when you press start to choose '1 Player Game' on the title screen and ends when you deal the final blow to Bowser.	Adam Sweeney
SNES	Super Metroid	00:51:00	Fastest completion only, regardless of items acquisition percentage. Non-continuous gameplay is allowed (ie continuing from a save point).	Brad Jackson

Some of the 'special conditions' rules have been abridged from the original website versions. Please check the Twin Galaxies scoreboard before attempting to break any of these records!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>Talking Trash

Two decades ago Spectrum gamers fell in love with the curious litter-em-up, Trashman. With its 20th anniversary upon us, Craig Vaughan chats with cult New Generation programmer Malcolm Evans

Back in the early days of 8-bit gaming, Malcolm Evans founded New Generation Software, a small backroom outfit that went on to enjoy a degree of success with the ZX81 games 3D Monster Maze and 3D Defender, and the Spectrum games Escape, 3D Tunnel and Knot in 3D. Then, of course, something quite bizarre happened. For reasons until now unfathomable, Evans coded the Spectrum version of the world's first dustbin-man simulator, Trashman. Despite the off the wall premise, the game went on to capture the hearts of gamers and was subsequently voted number 86 in the Your Sinclair Top 100 Spectrum games of all time. Trashman sold over 100,000 copies and spawned the controversial sequel Travel With Trashman, a game that finished by hinting at Trashman In Time, a third outing for our litter-collecting friend. That game was never released and New Generation Software folded several years later, with Evans quickly disappearing from the scene, leaving gamers gagging for more garbage grabbing antics.

The Trashman cometh

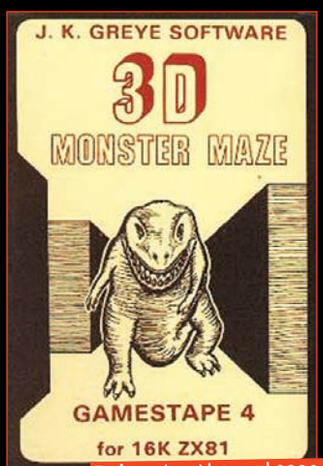
Twenty years later, with new fans enjoying Trashman via emulation, and stalwarts clogging retro gaming forums with talk of remakes and a possible sequel, Malcolm Evans reappeared, completely oblivious to the cult status that Trashman had achieved.

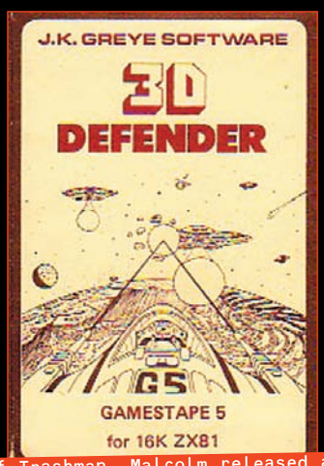
Now working as a systems analyst, coding onboard software for various scientific endeavours including Envisat, Beagle 2 and Cryosat, Evans describes himself as 33, but admits: "I'm not telling you to what base I'm working to these days!" The twenty-year-old unanswered question remains. What on earth inspired him to code a dustbin man simulator? Evans responds with an answer so banal that its veracity can't be questioned. "I warned Sinclair User that they would never publish the truth. They didn't and I bet you don't either. The fact is that New Generation needed a winner after a disastrous Christmas when we actually made a loss. Our increased costs weren't being covered by increased sales. Our advertising agent commented that 'all the kids want these days is rubbish'. After that meeting I went to the toilet, with my brother Rod's parting remark ringing in my ears. 'Stay in there until you come up with a winner, you always get your best ideas on the throne'. I did. Crap turned to rubbish, rubbish to dustmen, and then to Trashman."

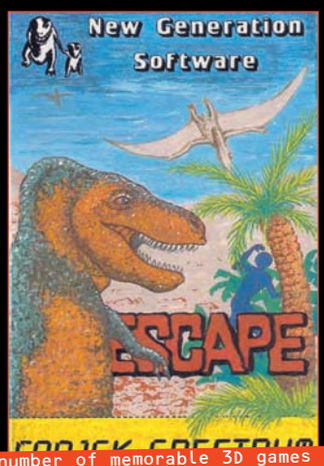
Surely the game had some of its ideas taken from previous hot-selling titles? Not as Evans tells it. "I never looked at or played other games, so when I came out with an idea it was usually not inspired by anything in particular. I know Jeff Minter believes Trashman was derived from his Hovver Bovver, but though I'd seen that game when it first came out, it wasn't the source of inspiration at all. Perhaps Frogger had an influence, I don't know. I remember one magazine covered the history of computer games with a family tree. It was the first time that I'd seen Trashman put into any sort of context. I remember Knot in 3D was on it too. If anything, that game was inspired by the BBC title Snake. Still, every one can make up history after the fact".

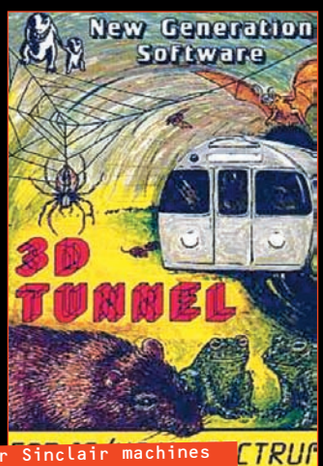
Recalling the Trashman development process, Evans remembers: "Like all my games, it was a solo effort. I used a Sharp PC with a parallel port down to the target Spectrum. I didn't use a debugger, or graphics package – it was all done by hand. By the end I knew every bit and byte of the code, and had spent most of the development time actually playing the game. Only then could I be sure there was nothing ready to bite after it was published. I started coding during that Christmas holiday. When Rod returned he saw the background for the first street and declared it a winner. About a month later our advertising agent saw it and commented 'You've done it'. It was all very encouraging. He suggested that it would be nice for those watching to have something to amuse them too. No other game seemed to consider the onlooker. That was how the repartee idea came up. The player has no time to read the gags for themselves, but the audience could appreciate the humour.

"Towards the end of development, I still hadn't come up with any of the banter between Trashman and the householders, so all the team sat around for about an hour trying to come up with ideas. Very little came up that was suitable, and what was worse was the fact that some of my better ideas were thrown out by committee. I have the clearest recollection of the one about the megalomaniac. It was inspired by Clive Sinclair's reported comment that you could control a power station with a ZX81! That evening I finished early and sat down quietly at home and came up with the list of 30 or so quips that finally went into the game. There were more but even I groaned at the worst of them, or felt we would end up with complaints from Mary Whitehouse for the rest".









Prior to the release of Trashman, Malcolm released a number of memorable 3D games for Sinclair machines

Portuguese pirates

Minor disagreements with colleagues aside, development went smoothly: "I suppose in all Trashman was three months work at 10 hours a day from concept to publication".

But did the finished product meet Evans' original expectations: "It was always time that was the problem. You had to gauge development time/costs against the decreasing life expectancy of a game. Piracy only exacerbated the problem. You had to keep coming out with product or the public and more importantly the distributors would forget you existed. We tried employing programmers, but it was never that profitable even though it filled holes in the flow of product. I did start writing a graphic adventure at one time but after a couple of months it became obvious that it was going to take too long to develop so it was scrapped".

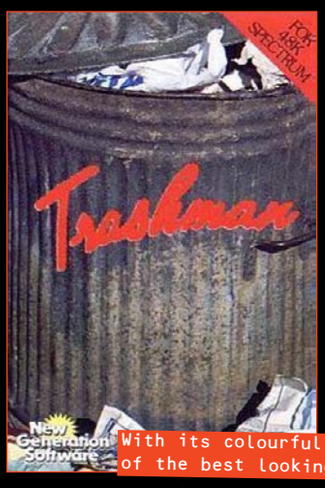
With the hard work done, Evans reflects on what happened next. "We took an incomplete version of Trashman to an exhibition where a number of distributors praised it. For a change, the topic of our advertising budget came up only later. Therefore most distributors were primed for its arrival. It took off well and lasted for about six weeks before legitimate sales stopped dead". Evans found out why later: "We were at one of the popular exhibitions at about the time Travel with Trashman came out, when a guy from Portugal came up to the stand. He boasted how well he had done with Trashman, selling nearly 20,000 copies. He said he'd given up piracy and wanted some of the new game. He was unceremoniously kicked off the stand. We'd sold 100,000 Trashman up until then. We already knew at that time that one big distributor, who was supplying one of the chain stores, was getting pirated product from Portugal. That was the level of piracy we were up against. It was no wonder that the smaller software houses like us found it difficult to survive".

History recalls that Trashman shipped bug-free, but Evans remembers that wasn't always the case with New Generation games: "It was too expensive in money and reputation to send out product with any known, or worse still, undiscovered faults in it. One major error crept in during duplication for a big order of 3D Tunnel for WHSmiths. There was supposed to be a 16K and a 48K version on the tape but alas the duplicators put two 48K versions on it. Unfortunately, it was Smiths who first found the error. It instigated a complete recall of the product and we had to replace it. I don't know whether that was the cause or not, but we never received another order directly from Smiths. Since its custom represented a large proportion of our turnover at that time it was an unqualified disaster; an expensive mistake. Pity Microsoft is too big to learn that sort of lesson".

Once Trashman hit shelves it received glowing reviews from the press, though it was the positive feedback from gamers that enthralled Evans. "I remember one occasion when I was walking to the office. We'd moved from the coach-house behind our home to offices in Bath. There was a group of boys in front of me taking up the whole pavement. One said 'I played a great game last night, Trashman'. He then went on to enthuse about it. If they had turned round they would have wondered what the old bloke with an inane grin on his face was up to. I walked past them wondering whether I should say something or at least thank them. I never did, but I thank them now. It made my week and if I knew what made it so popular I would have bottled it. Ideas for it came spontaneously, it wasn't a case of 'design then code'. Like 3D Monster Maze it slowly came to life. Perhaps that was the magic ingredient. When you think that the life of a game was only four to six weeks when Trashman came out, its longevity proves that there is life after death".

Travel woes

The sequel, Travel with Trashman saw the garbage grabber launch a worldwide anti-litter campaign. "It's ironic that Trashman is more travelled than I am," Evans quips. "He flies off in his dustcart and goes all over the world, on a route chosen by the player. In each location he must tidy up. He collects roses thrown by a matador's adoring fans whilst trying to avoid a raging bull; catches frogs jumping off tables at a French street-cafe; collects glasses at a German beer Keller avoiding the serving frauleins; picks up rubbish as a carnival passes in Japan; grabs fleeces in Australia whilst trying not to be trapped by the agitated sheep. Then there were the notorious levels where he had to pick up



With its colourful graphics and mock 3D perspective, Trashman was one of the best looking games during the Spectrum's early years

Trashman's litter

The World Of Spectrum and Retro Gamer forums recently began buzzing with the news that Malcolm Evans had been 'found'. His daughter, Rachel Evans explains that her dad didn't even realise he'd been missing

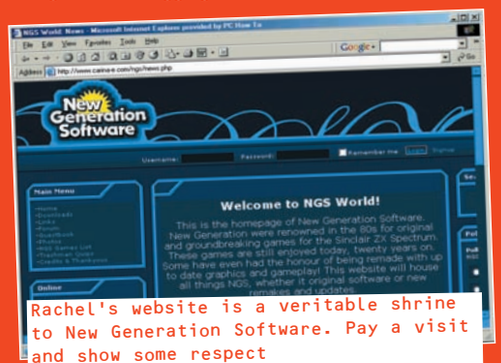
Rachel Evans, creator of the NGS World website. She lives in Bath and works for Future Publishing

Born in the same year as Trashman, Rachel Evans has more reason than most to celebrate the 20th anniversary of her dad's most popular game. She recalls: "I don't think I really knew what my dad had done until I was 10 and we had to do a project at school about someone famous we admired, and my mum suggested my dad. His work has fascinated me since I saw a picture of him dressed as a trashman for a magazine article and it stuck in my head. It's always Trashman that comes to mind when I think back to my dad's Speccy days. I didn't really know a lot about his other games until I started investigating for the anniversary.

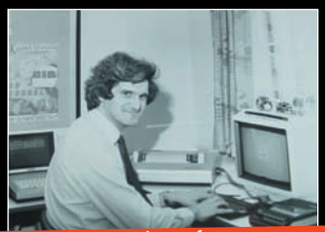
"My dad hasn't been in hiding, but it was only when I began looking around retro forums and found the Trashman remakes and told my dad about them that he realised his work was still being used and enjoyed. I only joined the retro forums because I wanted to congratulate the remakers. But when people said that they he been searching all over for contact details, I realised my dad had made himself anonymous to the community and I thought that something needed to be done about it".

Having reunited her dad with his fans, Rachel has another surprise up her sleeve. "My dad knows nothing about the website I've created that's dedicated to him and his New Generation games. It's been made with the help of people all across the Internet. Fans have been collecting magazine features, staff photos etc. Hopefully, when my dad learns about the website, I'll be able to get hold of some new 'never seen before' pictures and other memorabilia to share with everyone. On the website there's a guest book for people to leave messages for my dad, as well as a forum for people to ask the questions that they've always wanted answers to. I hope your readers will visit **www.ngsworld.net** and help celebrate the anniversary. What my dad is aware of is that I'm currently compiling a collection of all the games made by New Generation Software. He's kindly agreed to sign these, and they will be auctioned off with all proceeds going to Cancer Research, a charity close to our hearts".

With forums members talking about the possibility of the trilogy finally being completed by Malcolm Evans, Rachel is quick to join the clamour: "A lot of people have spoken to me about it, asking if my dad would make it or not. I personally would love to see my dad complete the set, though I'm not sure what it will take to convince him he should make it though. Hopefully, if enough people take interest in the website, show him that the third game is needed and will be enjoyed as much as the first two, then that may sway his decision. Along with me nagging him too".



Rachel's website is a veritable shrine to New Generation Software. Pay a visit and show some respect



Malcolm posing for a photograph, with a Speccy on the right and a Sharp PC on the left

hankies at the Wailing Wall in Jerusalem, and tidy away pilgrim's sandals in Belize, India. There were many more screens, each requiring a different technique to avoid the various obstacles.

"Each one of my games was different from the previous. Even the software techniques I used were a continual development. It was this that I found the most interesting aspect of games writing. The follow-up game to Trashman needed to be another financial winner. Obviously creating a sequel would make that more likely. I suppose some gamers expected something very similar, a mere extension of the original, but such a repeat was not in my nature. The theme was therefore devised to appear as a sequel but the software techniques employed were wholly different. I hoped I could satisfy gamers and myself at the same time. I believed the gameplay would be more complex since, unlike Trashman, the automatic movements on each screen were completely different and therefore more unpredictable upon first play".

Reviews were mixed for the game, with some commentators slating the 'crass humour', but Evans gives such criticism short shrift. "We gave the first copy of the sequel to a reporter from

Sinclair User when he did a feature on our company. Over lunch he mentioned he had been a Hare Krishna follower in his youth. Whoops. His was the first review to hit the shelves. One man's opinion doesn't make a slating, but it did lead sheep..."

After Travel with Trashman, New Generation began to feel the pinch. "The problem with the industry was that advertising costs rose dramatically, from £50 for a quarter page when I started to more than £1000 per page before we pulled out. Initially we dealt with the retailers directly but then had to deal with the distributors who demanded their major cut. We were left with only 25% of the retail price, with which we had to pay for development, production and advertising. And to make things worse, the first question any distributor asked was how much was being spent on advertising. The quality of the product was immaterial. What with the life cycle of product becoming increasingly shorter, it became less viable for a small company to continue. So we sold the back catalogue to Virgin and slipped into another field. I remember seeing all the unsold copies of Trashman, 3D Monster Maze etc going into an incinerator. It was a tragic part of the deal.

"The company went on to develop a portable PC with a high-resolution touch screen. This was in 1986, a long time before portables were in general use. It was initially directed at the furniture design business where plans could be entered using a pointer or finger. Within five minutes a rep could provide a customer with a fully-costed kitchen design and produce a hard copy 3D view. Although we sold some 40 units, the turnover was too slow and we went into liquidation. Being the biggest creditor, I ended up losing our home. Fortunately I managed to return to the aerospace industry where I had started in the late 1960s. I started on hardware design for Envisat, investigating the effects of global warming. When I went to Science Systems as a systems analyst I became involved in onboard software. I've been heavily involved in Cryosat, which will launch in February 2005. It's designed to measure the thickness of the polar ice to within millimetres. This is far more accurate than previously achieved and should give us a better figure for the rate the ice is melting."

The sequel was quite different to the original, with each location playing like a separate mini-game

Buried treasure

Having left gaming, Evans disappeared into relative anonymity until recently. "I received a speculative letter from a writer for Computer and Video Games in 1998 and an interview was arranged. Other than that, my son keeps me informed of his exploits downloading old games, but I wasn't aware until very recently, through my daughter, that Trashman had such a following or that there were communities of online fans reliving games through emulation. I can guess what the legal arguments are. From a personal perspective I think that programmers should be proud of what they achieved and try not to be too greedy. It's worth remembering that copyright damages can only be based on perceived losses and I don't think 20-year-old games have any great commercial value now. I'm pleased and astounded that Trashman still gives so many people fun. When I originally wrote it, it was for a very limited processor. Now with the current level of graphics available it's interesting to see what remakers are doing with it and it gives me a tremendous sense of pride. Trashman and his friends were a huge learning curve for me, rather than a millstone".

A product of its era, there's little doubt that such a theoretically bizarre game would never get off the drawing board these days, as Evans surmises. "The cost of developing a game has now risen to six figures. Backers will not invest in any group whose previous products have not made a profit. Hence the industry doesn't take risks. In the beginning we were cutting a swath through virgin territory, so we were gambling with every game. Some we lost, some we won, but we kept going. The smaller companies didn't have to consider investors. All the time, it was our decision and our loss. All expanding industries attract money then die the same way. Originality is always the victim. Perhaps there is a way to break out of the spiral but I don't know what it is".

The conclusion to Travel with Trashman mentions a time machine, but sadly the proposed Trashman In Time was never completed

>Trashman returns

With Trashman celebrating his 20th anniversary, the thriving Spectrum remake scene has kicked into action with several tributes. We spoke to Andrew Pointon about his recent remake, Trashman

Andrew Pointon, hard at work bringing Trashman back to life

Retro Gamer: Please tell us a bit about yourself.

Andrew Pointon: I first started coding on a second-hand ZX81, and still have school exercise books with my 1K games written on them. Eventually, I asked for a Spectrum for Christmas because I'd seen one on display in WHSmiths and spent the whole day in the shop playing Jetpac until I was kicked out at closing time. Unfortunately, it wasn't a Spectrum that I ended up with. When my birthday arrived I was horrified to see that I'd been bought an Oric-1. My stepbrother fared better – he paid for a 16K Spectrum but found a 48K model in the box when he got home. With my Oric redundant, I'd sneak into his room and play on his Spectrum while he was at work. He'd often catch me and slap me around for my trouble, but I kept going back for more. Eventually I managed to get my own 16K Spectrum and went on to learn BASIC. That was pretty much the last coding I did until a couple of years ago. After my Spectrum I had an Atari ST, and then an Amiga, and used them primarily for playing games, and never tried to write any software until two years ago when my website **www.tcksoft.co.uk** was born. I still love the Speccy and can understand why it's the best-loved machine of all time. It wasn't the most technically accomplished piece of hardware in the world, but it was the one with the most heart and soul.

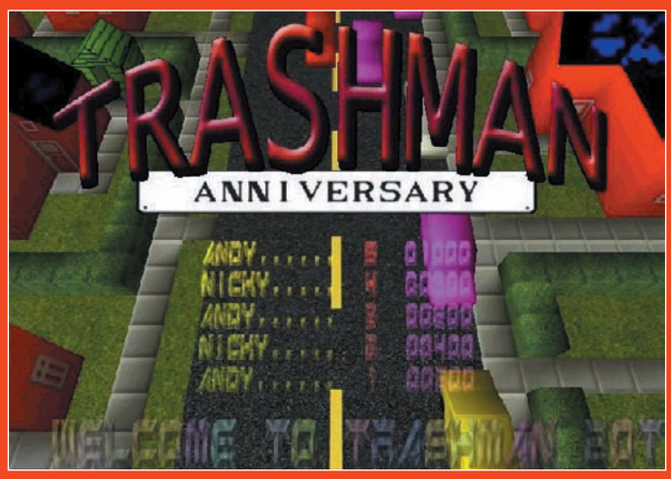
RG: What are your memories of Trashman?

AP: The game leapt out at me instantly when I first saw it. It was so bold and colourful and the graphics were silky smooth. It reminded me a lot of the Ultimate games. The cars looked great zooming up and down the road. I'd get hypnotised by them and just stare until I ran out of time. I'd played Frogger in the arcade, and Trashman seemed to have a lot in common with that game, but it was also so much more. It seemed like a whole new world had been brought to life, although that might seem a stretch to some people. Despite having only 48K to play with, it seemed that Malcolm Evans had created living breathing city streets.

The game was a mixture of both fantasy and reality. I think it's a style of game that has come back with a vengeance – there are so many games now set in real life situations, such as the GTA series. Malcolm Evans was years ahead in this respect. When the original game was released, most of the games on the shelves were science fiction and fantasy, and completely fictional – 180 degrees away from the real world. He linked the world of games with the real world.

RG: Why remake Trashman 20 years on?

AP: One of the very reasons I chose Trashman to remake is the very fact that it is twenty years since it was first released. I had a short list of possible games to remake, and this one seemed to stand head and shoulders above the others. I did a mini poll to gauge the popularity of my short list, and the people I asked insisted that this was the game I should tackle. The anniversary of the game was the real clincher. Some of the people I work with were born after the game was released. It's pretty scary really, because it seems like only yesterday. It was nice to bring it back and it felt like the right time. This remake is my birthday present to the original. Happy anniversary, Trashman.



RG: What was your primary goal in coding your remake?

AP: I wanted to make it as faithful as I could, while attempting to add a little depth to the world to make it look a little deeper. I think that the true 3D perspective on the houses really works. There were people who said I should make the times lenient or remove them all together, and some who wanted me to make more modern textured graphics for the houses. For better or worse I decided to try and make the houses look as much like their 2D counterparts as I could.

RG: How long did your Trashman remake take to code?

AP: I started work on the first lines of code in the closing days of August 2004, after wasting almost a month saying I didn't think I could do it in the time available. Some of the guys online just wouldn't take no for an answer. I'm really glad I gave it a big push, as I probably could have frittered away the rest of the time and accomplished nothing. As it turns out I managed to get the last graphics and routines in place a few days before the end of September. So all in all the development time was around four weeks, maybe a little longer.

RG: What software/tools did you use?

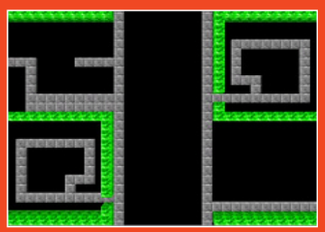
AP: My coding weapon of choice is Blitz Basic, which I have been using for around two years now. I've learned a lot and hope my games have improved in quality a little over that time, but I still have so much to learn. I used a free modelling tool called Wings3D to do the houses and some of the other objects in the game. This was my first foray into 3D modelling and I think it worked out quite well. Once the plain objects were built I used Paint Shop Pro 5 to created the textures – making them as close to the original Spectrum graphics as I could, to some people's dismay. A great little shareware sound editor called Gold Wave was used for cutting up and re-sampling the wav files for the sound effects.

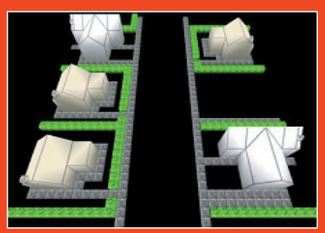
RG: What about remaking other New Generation games?

AP: 3D Monster Maze already has a great remake by a cool guy called Myke P, so I think that one is covered. Maybe I could be convinced to do a remake of Travel with Trashman if people were desperate for it. I think that game is the Spectrum equivalent of Marmite – some people love it and some people loathe it. It's a rather different game to the original, and maybe that's what some people didn't like. I'm positive that Corridors of Genon and Tunnel 3D could make good remakes.

RG: Have you had any contact with Malcolm Evans?

AP: I did try in vain to find some way of contacting him to ask for his blessing but it seemed that he didn't have an online presence. The only references I could find to him were on ZX Spectrum tribute sites, such as the one dedicated to Crash Magazine. I decided that I should go ahead with the project and hope for the best. Shortly after it was released on October 1st, a message popped up in a couple of forums from a user named 'Rach' saying that she was the daughter of the original author, and that she had shown her dad the game and he thought it was wonderful. After a brief time thinking that it was a practical joke, I allowed myself to feel a rush of pride. I'm still really stunned to be honest, and never in my wildest dreams did I ever think that an author of such a classic original game from my youth would be commending me on my work. I'm shaking my head right now in wonderment. RG*





Building suburbia. First the street layout is defined, then the skeletal house structures are created. After which colour is added and the final map takes shape

20
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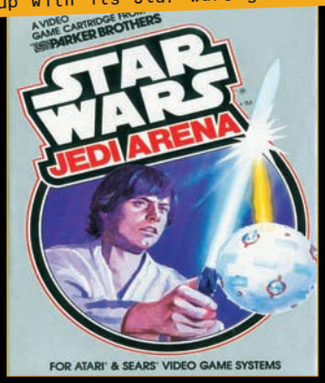
:-Games of the Century

In the early 80s, 20th Century Fox threw open its archives in search of movies that could be turned into gaming gold, eventually releasing a number of movie tie-ins for the Atari 2600 console. As Dan Whitehead discovers, the results were interesting, to say the least

Cast your mind back to the very dawn of videogaming. A time when the garish 70s started to seep into the dayglo 80s, and the world of microchip technology offered a glimpse of a science fiction future filled with hi-tech leisure and computerized living, all tantalizingly within reach of the common man.

With such technological advances, it was a turbulent time for the entertainment industry – and none more so than the movie biz. The 70s had finally seen the collapse of the old studio system that had served Hollywood so well since the 1920s, and a new breed of movie director was taking over – independently minded but commercially aware. Names like Spielberg, Coppola, De Palma and Scorsese were the hottest ticket in town. But it's a certain Mr George Lucas we need to discuss for the purposes of this feature.

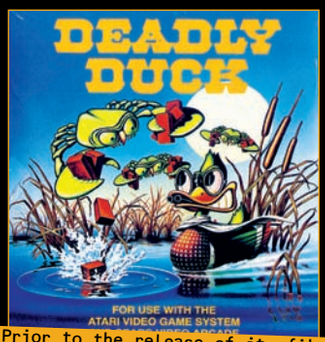
Oh how Fox must have sobbed when Parker Brothers cleaned up with its Star Wars games



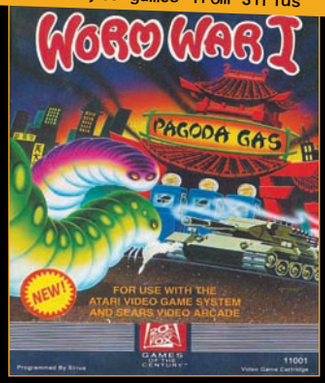
Once upon a time, the idea of flogging merchandise based on a movie was little more than a niche market, used for the occasional promotional trinket but nothing more. It certainly wasn't seen as a valuable extra revenue stream, so when young George asked 20th Century Fox if it'd be OK for him to keep the merchandising rights for this cheap little sci-fi movie he was making, the studio suits signed them away without a second thought.

Along comes 1977, and Star Wars explodes into the popular consciousness. Fox could only sit and watch as Lucas turned his now-lucrative merchandise rights into the foundation of his Lucasfilm empire by selling off the right to make toys, clothes, lunchboxes, surgical harnesses and – yes – videogames based on a hit film that, technically, belonged to Fox. And so, having watched Parker Brothers grow fat on the Atari 2600 games based on its film, the Fox empire belatedly turned its attention to these new electronic toys, launching a subsidiary in the shape of Fox Video Games ("Games of the Century"). In total the studio released eight games for the Atari 2600 between 1982/3, and a number of other titles were planned but later dropped.

We've rounded up each of the games and rated them out of five. This simple scoring system does not reflect the overall quality of the game, but rather how successful Fox was in translating its movies to the console. In other words, if you were an eager-eyed Timothy Dalton fan ripping the cellophane off the Flash Gordon game in 1982, would you have been transported into the world of the movie, or would you have been left scratching your head and trying to work out how the splurge of chunky coloured blocks on screen related to your cinema experience?



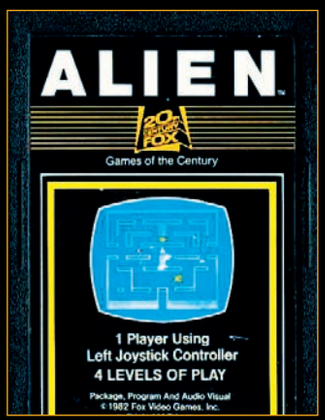
Prior to the release of its film tie-ins, Fox Video Games licensed arcade-style games from Sirius



>Alien

The movie (1979)

If Star Wars showed Fox that sci-fi was a viable genre for family films, it was this brooding classic that proved it could also be fertile soil for adults-only horror. British director Ridley Scott, with only one other film to his credit, took Ron Shusset and Dan O'Bannon's generic monster-on-the-loose script and turned it into a taut masterpiece of pant-soiling terror, all delivered with a clinical minimalist sensibility. It takes a nailbiting 45 minutes before the action kicks off, but by that time the audience had been wound so tight that when the titular beast bursts from John Hurt like a badger out of a hot wheelie bin, cinematic infamy was assured. Classy and scary, it's a deserved classic.



The game (1982)

Aliens. Spaceships. As a candidate for gamehood, Alien was a no-brainer and so it came to pass that Scott's highbrow experience in relentless movie terror became... a Pac-Man clone. Because, hey, we all remember the scene in the film where Ripley has to run around a maze collecting dots, right? OK, you can forgive them for concentrating on the chase aspect, and for not quite capturing the essence of Sigourney Weaver in pixel form, but it's less easy to accept the presence of no less than three flashing Venus flytraps masquerading as Giger's singular and disturbing mecha-sexual xenomorph. Despite such oddities, including an additional screen unimaginatively based on Frogger, the game was at least semi-faithful to the film and pretty good fun to play.

RETRO RATING 3/5

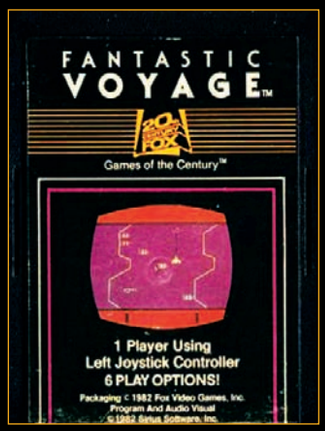
>Fantastic Voyage

The movie (1966)

As appealing concepts go, the prospect of hosting a miniaturized Raquel Welch in your bloodstream resonated quite strongly with the male psyche of the 1960s for obvious reasons. That the crumpled squint of Donald Pleasance was along for the ride didn't seem to put people off. Based on Isaac Asimov's novel, the direction may have been pedestrian but the trippy special effects, representing a journey into the body of the President in order to save his life, more than compensated. Especially as most viewers were smashed on acid cakes. Damn hippies.

The game (1982)

Hurtling along some chunky pixellated veins, zapping clots and evil blood cells, may not be an entirely accurate representation of the movie, but its close enough. The game features enough cool



features, like collapsing tunnels and objects that break apart rather than vanishing completely, to earn it a pass. River Raid did the vertical scrolling thing better, but this is more than respectable.

RETRO RATING 4/5

>The Earth Dies Screaming

The movie (1965)

Here's an obvious choice for videogame glory, and no mistake – an utterly obscure British sci-fi potboiler about an astronaut who returns home (to Surrey, where all astronauts live) only to discover that alien robots have taken over and are raising the dead for some reason. Directed by Hammer stalwart Terence Fisher, it's actually a very fun offering made all the more endearing for its quaint English village settings. The Earth doesn't so much die screaming, as die politely complaining that the aliens have left the door open, and the draught is spoiling Mrs Fathersham's scones.

The game (1983)

So, how do you go about adapting a weird decades-old English movie about robots, zombies and astronauts from Surrey into an action-packed videogame for America's wild-eyed 80s youth? Simple, you discard absolutely everything from the movie apart from the cool title and shunt out a game where you fly over the surface of a strangely pink planet shooting flying saucers. Or they may be scones. It's hard to tell.

RETRO RATING 1/5

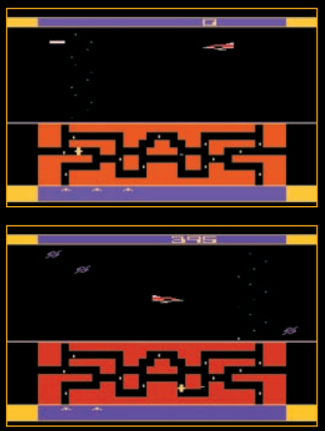
>Flash Gordon

The movie (1980)

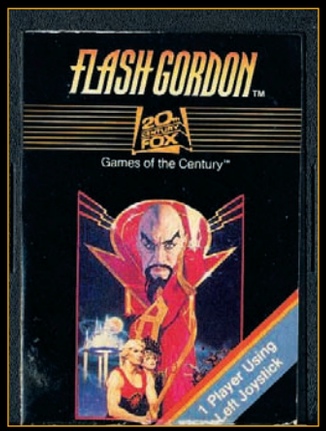
If you dug up the skeleton of Larry Grayson, dressed it in a gold lame basque and made it perform songs from Oklahoma! by using an elaborate puppet system constructed from silver tinsel... you still wouldn't be half as camp as this gloriously excessive movie. Blue Peter stooge Peter Duncan gets killed by a tree stump! Brian Blessed shouts about everything, while wearing feathery wings and a hairy nappy! That Princess chick wears almost nothing! Its utter crap and yet also quite brilliant.

The game (1982)

Although the movie offers up a dozen sequences that seem tailor-made for even the most primitive gaming experience, this effort instead opts for a side-scrolling Defender rip-off with no relation to anything that happened in the movie, other than being asked to believe that sitting at the controls of that tiny blocky spacecraft whizzing from left to right is a



pixel version of blank-faced Flash actor Sam Jones. It's not bad, as Defender rip offs go, but it's too easy to die when you're at the edge of the screen and without the hairy pants of Blessed to distract you, there's no incentive to stick around.



RETRO RATING 2/5

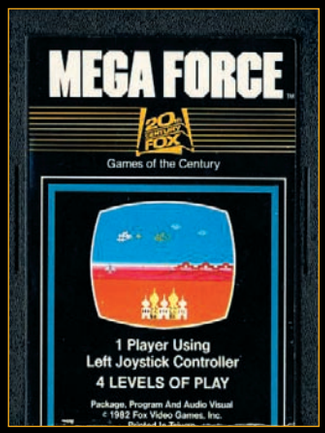
>Mega Force

The movie (1982)

Where to begin? Mega Force is a hilariously bad action movie, shot in Israel for a budget that can't have been more than the price of a McDonald's Happy Meal. The 'mega' force of the title is a go-getting American rapid response team that zooms around on dune buggies and motocross bikes (decked out in what appear to be old washing-up liquid bottles for that hi-tech sheen) to kill evil freedom-hating brown people from overseas. Not bad enough? OK, the leader of Mega Force is called Ace Hunter. He wears a genital-hampering silver jumpsuit. And he's played by the mayor from Spin City. Seriously. It's like someone peered into the mind of George W. Bush, and this is the movie they found playing endlessly on the inside of his skull.

The game (1982)

Perhaps unsurprisingly, a mindlessly shallow action movie produces a mindlessly shallow action game in which you race across the screen bombing and shooting all manner of things in the desert. There's not much to get right, of course, but it deserves praise because unlike, say, Flash Gordon, you can at least see the link betwixt movie and game in both graphics and gameplay.



RETRO RATING 4/5

>Spacemaster X-7

The movie (1958)

Yet another obscure B-movie summoned up from the Fox vault, we suspect more for its gamey-sounding title than any actual potential for interactive fun. This talky black and white filler feature (originally part of a double bill with the original Vincent Price version of The Fly) features a voracious space fungus brought to Earth by unwitting astronauts (not from Surrey this time). There's no monster, only a few short scenes of a spaceship and very little action at all. Perfect! The kids'll love it!

The game (1982)

You control a floating asterisk, and try to batter down the shields of an alien base in the centre of the screen. As you chip away at the shield, the base is also recharging them, so gameplay could, in theory, go on forever. A simplistic and rather dull concept, it's also got nothing whatsoever to do with the movie so, as you can imagine, all three Spacemaster fans who'd patiently waited twenty four years for the game were absolutely furious.

RETRO RATING 1/5

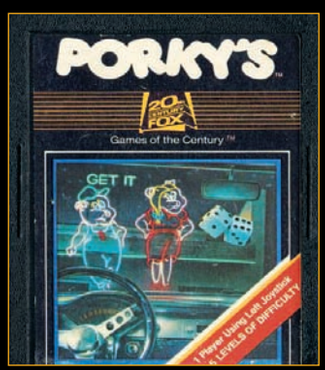
>Porky's

The movie (1982)

While Animal House may have come first, you can thank this boob-fixated comedy for popularising the 'horny US boys' genre and thereby leading to recent hits like American Pie and Dude, Where's My Car? And by 'thank', we obviously mean 'blame'. Anyway, this lewd offering follows the antics of some 1950s high schoolers as they try to look at naked women, and fall foul of Porky, a corrupt and sadistic local strip club owner. The lads vow revenge and scatological mayhem ensues, along with an amazingly ill-placed and hypocritical lecture on the evils of bigotry.

The game (1983)

Astonishingly, this game not only follows the plot of the movie as well as any ancient Atari console could reasonably be expected to, but the fact that such a filthy-minded movie got adapted for what was, after all, a kids electronic toy is probably worthy of note in itself. Set over three screens, beginning with a Frogger rip-off in which you have to brave a busy road, the game's biggest failing is that there's no way to ever actually die and it's all too easy to end up trapped trying to pole vault out of Porky's cellar in one of the most frustrating pixel-perfect gameplay challenges ever. Also, face it, the Atari 2600 really can't do the female breast justice.



RETRO RATING 3/5

>M*A*S*H

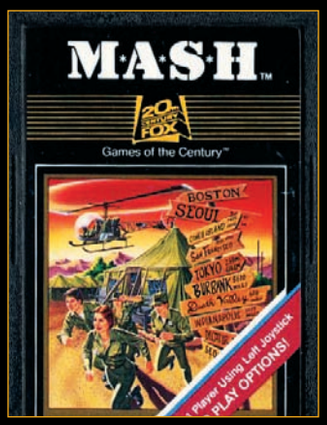
The movie (1970)

Robert Altman was Oscar-nominated for this timely lampoon of military madness, set on a mobile army surgical hospital during the Korean war, but plainly skewering the parallel lunacy of Vietnam as well. Donald Sutherland and Elliot Gould headlined as the nihilistic surgeons who turn to gallows humour to survive the horrors of war. It would, of course, also be turned into a long-running sitcom which jumped wildly between slapstick laughs and maudlin sentiment at the drop of a hat.

The game (1983)

The market for satirical medical war games has never been huge, so you have to wonder at the wisdom of turning this movie/TV show into a Choplifter clone, of all things. Even with the lure of a free T-shirt (men's medium only, sorry girls). To be fair, they did include a nod to the medical side of things with the chance to perform pixel surgery on a patient who, it must be said, looked a lot like Mr Greedy from out of the Mr Men. Sadly, the game did not capture the imagination of gamers and thus plans for Dr. Strangelove's Pole Position and Catch-22 vs Dig Dug were scrapped soon after.

RETRO RATING 2/5



>Development hell

Titles like Six Pack and Entity were announced by Fox but never officially released

Not all of Fox's game plans came to fruition. Some were developed, even finished, but for one reason or another never made it onto the shelves. In a 1982 product catalogue, Fox announced games based on such diverse movies as the Dolly Parton office comedy 9 To 5, the 50s scholarly sci-fi drama The Day The Earth Stood Still, the Kenny Rogers kid caper Six Pack, and the Rocky rip-off Tough Enough. None of these tie-ins ever made it beyond the drawing board, but three other unreleased titles have since surfaced and can be sampled thanks to the wonders of emulation.

Alligator People

This Lon Chaney Jr potboiler from the 1950s is yet another obscure movie that Fox decided to dust off. The game in question even vaguely resembled the story of the movie, as you race around the swamp trying to find antidote to stop your friends being transformed into mutated alligator folk. It's hard to see why this wasn't released, as it was both completed and rather good fun.

Planet of the Apes

For years this prototype cartridge was mislabeled as Alligator People thanks to being stored in the wrong box! However, a little detective work by AtariProtos.com soon revealed that this was, in fact, the announced-but-never-seen Planet of the Apes game. It doesn't help that they swapped Charlton Heston's loincloth hero for a man with a nice shirt and a huge purple arse, while the supposedly advanced simians rampage around like naked savages, but the final level does indeed feature a dubiously rendered Statue of Liberty. Sort of like a half-finished Pitfall, this game was finally completed by enthusiasts and released in 2003 as Revenge of the Apes. Both versions can be found online.

The Entity

There just aren't enough games based on movies about demonic rape. Bafflingly based on the 1981 schlocker about a young woman (Barbara Hershey) molested by an evil spirit, the game is an utterly unrelated arcade puzzle in which you have to box in the frantic 'entity' by using magic walls, forcing it ever upwards until you dispose of it completely. Yup. Seriously. Chances are, Fox realized that most people wouldn't touch a game based on such a movie, and those that did would be very annoyed to find the game in question involved neither demons nor molestation. RG*

eMag

>Keep the Faith

From Saddam Hussein and Hellraiser's Pinhead to Moses and the Holy Mother – when videogame company Color Dreams found Jesus and changed its name to Wisdom Tree, it quite literally went through a change of biblical proportions. Per Arne Sandvik goes in search of enlightenment

Color Dreams never was a major contender in the video game industry. It seemed to spend as much time dodging Nintendo's sanctions for illegally releasing games as it did actually developing games. "Nintendo wanted a lot of money and a lot of control," explains videogame developer and former Color Dreams employee Jon Valesh. "Had they been more realistic about how much money they deserved, we would have been an official developer.".

Before Dan Lawton saw the light, Color Dreams shocked the big N with titles like Operation Secret Storm and Menace Beach

games were a hoot and simple-minded fun," says Roger DeForest, former graphic artist, programmer, designer, music developer and tester. "It kept us off the streets"

By today's standards, these premises don't sound very extreme. There have been several games in recent times with Iraq's former dictator as the bad guy, and titles like Dead or Alive Beach Volleyball and The Playboy Mansion are practically nothing but skimpy bikinis. But compared to the games allowed through Nintendo's filters at the time, Color Dreams' catalogue was next to scandalous.

So did the games stir controversy? "Due to the titles?" asks Valesh. "No. We received negative feedback due to the quality of the games, but never due to the titles or the content." This negative feedback was not entirely unfounded. The titles often had major bugs (that in one case rendered a game impossible to complete), and the controls never could match those of the world's most famous plumber. DeForest remembers it wasn't always fun "staying up all night working on games that you knew in your heart of hearts were pretty damn lame. I really wished we had jumped on Hellraiser more aggressively when we had the license to do so."

But the Hellraiser licence expired, and producing a game with its thematic was clearly out of the question after CEO Dan Lawton announced that the entire company was to turn towards the cross in 1991.

The games weren't your usual fare either. In 1990's Menace Beach, the hero's captive girlfriend lamented his absence while her clothes were rotting off to reveal a skimpy bikini. In Operation Secret Storm, your mission was to kill Saddam Hussein. In the unreleased Hellraiser (based on Clive Barker's movie), you joined the evil Pinhead in his quest for human souls. There was even a game in development where a maggot crawling its way through a human body was the protagonist. "We all thought the

Good Lord!

"He was so excited when he presented it to us," DeForest remembers. "Like a kid at Christmas." But what spurred the radical conversion? Was it a vision? A calling? Did Lawton have a life-changing experience?

"It was a turn towards money, not religion, that drove the change," Valesh says. "Nintendo's behaviour at the time has been well documented. It used aggressive and illegal methods to hold retailers to certain prices. It wasn't long before we were locked out of normal retail channels. We all spent a lot of time thinking of ways to get around Nintendo and find a niche where we would be secure. That's when the idea of religious games came up. Nintendo had a well known reputation for avoiding religion... that gave us a safe haven."

DeForest was, however, not impressed by the idea at first, and neither were the rest of the crew. "Lawton offered us a great financial incentive to develop religious games, but none of us wanted to do it. Being the non-innovative dummies that we are, we didn't think it'd go over very well. Finally we were forced to make religious games and it seems that practically overnight we changed from Color Dreams to Wisdom Tree."

Quite a number of games were released under the new logo. First on the market was Bible Adventures, where you played as Noah, using your super-human jumping abilities to bring cows and monkeys into his ark. Other stages let you take on Goliath in the role of King David and save baby Moses by manoeuvring his sister Miriam down the Nile. But, according to Valesh, not everyone was too happy about the change. "One person left because he believed religious games conflicted with his Christian beliefs."

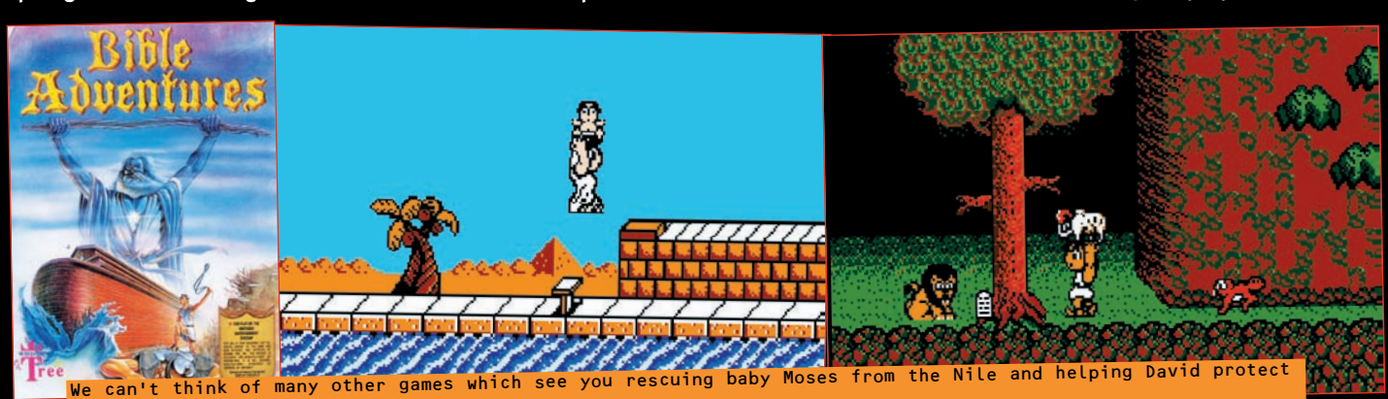
When you look at the games that were produced, this point of view isn't hard to understand. In King of Kings, a platform game documenting the early years of Jesus, Joseph and the pregnant Mary travel to Bethlehem by donkey. Scenarios include the jungle and the Artic, and polar bears and Pharisees are waiting to maul or cane you around every corner. Even squirrels seem to have an agenda against the unborn baby Jesus.

Rewrites are a fundamental part of any adaptation, but not everyone was too happy about changes made to the Bible. Others may have had a hard time digesting the sight of the Mary jumping across the rooftops of Jerusalem in search of the missing Jesus.

Still, money was made. "In hindsight it was a smart move because the Christian game market had not been tapped then," says DeForest. "The games were a huge hit. You could say Lawton was way ahead of his time on that one. I mean, who else but Dan Lawton would think to put The Holy Bible on GameBoy, for crying out loud!"

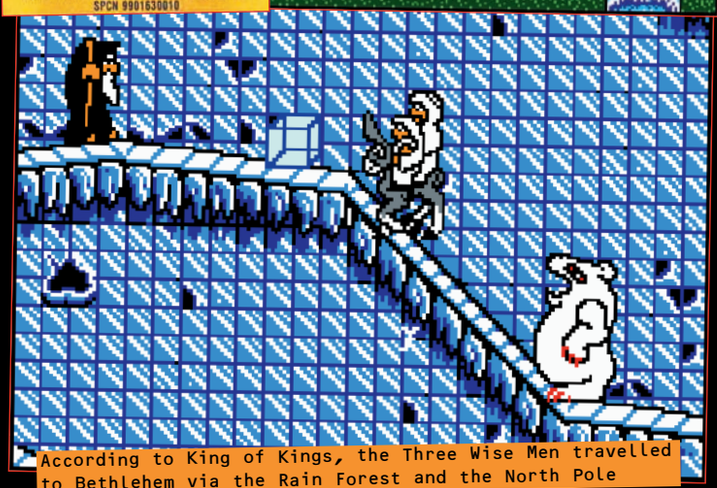
Over the next 14 years, a virtual flood of games followed, including Exodus, Joshua and Spiritual Warfare. There was even a title for the Super Nintendo called Super 3D Noah's Ark! This game was in fact based on the Wolfenstein 3D engine, but instead of killing Nazis you now used a slingshot to feed revolutionist animals on a rampage.

"They were supposed to be fun," comments Valesh on the unconventional content of the games. "The religious shtick was there to help them sell, but they were still games. We were not religious people."



We can't think of many other games which see you rescuing baby Moses from the Nile and helping David protect his flock from lions and squirrels

KING OF KINGS
Tree
**TO START GAME: Please wait up to 9 flashes on TV screen.
**POWER ON: Please wait 2 seconds between Power OFF and ON.
SPCN 9901630810



According to King of Kings, the Three Wise Men travelled to Bethlehem via the Rain Forest and the North Pole

A new leaf

So, looking back, how do the developers feel about their time under the branches? "My most positive memory is of the people," Valesh remembers. "You'll never meet a more intelligent group." DeForest agrees. "My most positive memories would probably not be work-related at all. It'd be hanging out with the crew during lunch or after work. I'm glad that whole experience was a part of my life. I'm at the point in my life now where I don't see bad experiences anymore, just experiences. In my mind, anything you experience in life can have positive repercussions if you just look for it."

Today, most of the original programmers of Color Dreams and Wisdom Tree have come together to form Star-Dot Technologies, a company that mainly produces security cameras. Wisdom Tree, meanwhile, is still in business, and most of its old games are still available through **www.wisdomtreegames.com**. As for Jon Valesh and Roger DeForest, they have moved on to other things. "At the moment I build systems to interface very old mainframe applications to the modern world," says Valesh. "But that changes from time to time."

DeForest has no reason to complain either. "I have a wife and son. I work freelance in the film and video industry, making commercials, music videos, etc. I think perhaps God is thanking me for working on all those religious games!" RG*

It may look like Wolfenstein 3D, but instead of knives and guns you're armed with fruit and feed!

>Sunday Bloody Sunday

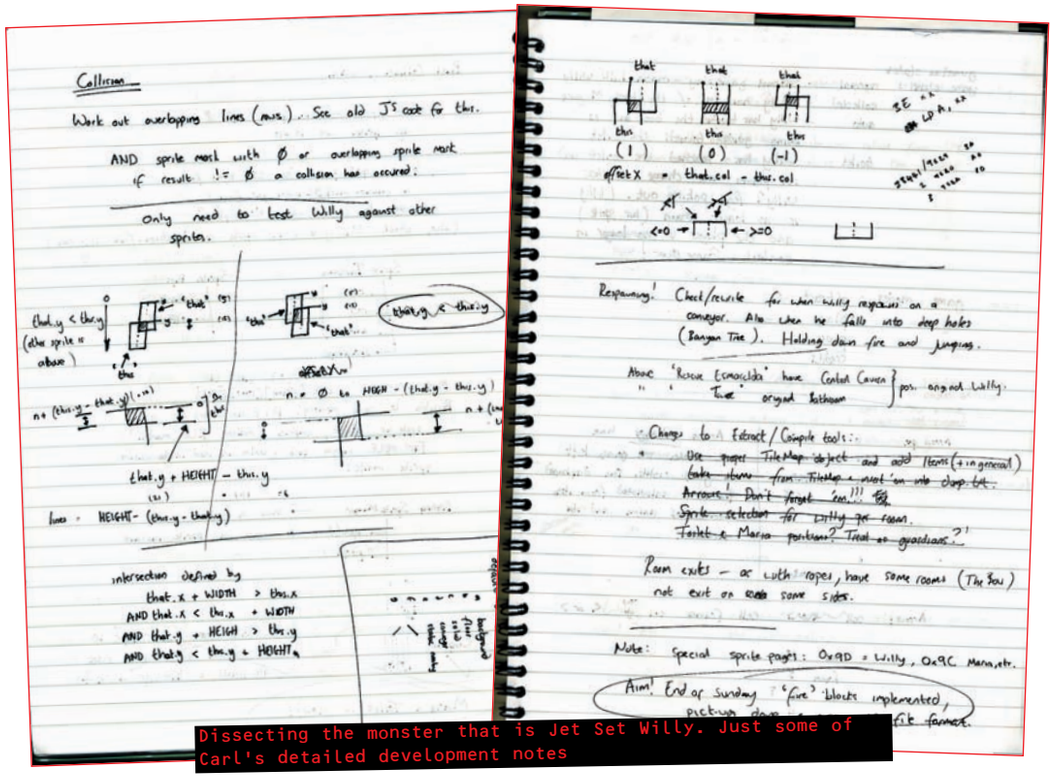
Do the screenshots below look familiar? Well that's because Wisdom Tree's Sunday Funday was basically a new version of Color Dreams' Menace Beach. There was one crucial difference though. Whereas in Menace Beach the aim was to jump on your skateboard and save your girlfriend from killer punks, in Sunday Funday you had to jump on your skateboard and make it to Sunday School on time. And yes, you still had to deal with killer punks along the way. It was enough to put kids off religious education for life!

jet set willy

>Jet Set Go!

Miner Willy is on the move, with Jet Set Willy heading to mobile devices in time for Christmas. Lead programmer Carl Woffenden tells the tale behind this brilliant new version, and reveals that there was a time when it nearly didn't happen at all

One morning I awoke and I decided I'd had enough of working for 'the man' and needed to do my own thing. Go out into the wide world and achieve something. It's something everyone must do. Having worked at Jester Interactive as its sole mobile developer it seemed obvious to continue along similar lines and specialise in mobile Java games. The suggested first product for my new venture, given how well my earlier version of Manic Miner was received, was Jet Set Willy. I spoke with the Jesters about it and they were keen. So far so good. I set up a new company called Numfum, pulled in a few friends to help out, and away we went. No contracts, none of that messy legal stuff. After all, we all knew the Jesters and the Jesters knew us. Everyone just wanted to get on with it...


Collision
Work out overlapping lines (max). See old JS code for this.
AND sprite mask with 0 or overlapping sprite mask
if result != 0 a collision has occured.
Only need to test Willy against other sprites.
Respawning! Check/rewrite for when willy respawns on a conveyor. Also when he falls into deep holes (Banyan Tree). Holding down fire and jumping.
Above 'Rescue Esmeralda' have Ceiled Caverns
Changes to Extract/Compile tools:
Arrows! Don't forget Sue!!!
Sprite selection for Willy per room.
Toilet & Maria portions? Treat as guardians?
Room exits - or with ropes, have some rooms (The Sea) not exit on each same sides.
Note: Special sprite pages: 0x9D = Willy, 0x9C Maria etc.
Aim! End of Sunday 'fire' blocks implemented,
Dissecting the monster that is Jet Set Willy. Just some of Carl's detailed development notes

So how, exactly, were we to go about recreating a well-known and well-loved game? Do we completely update it like the Amiga version? Maybe create a whole new Willy-themed game? After all, given the restrictions of the most prolific handsets, fitting in sixty-odd rooms was going to be a struggle. Ideas were tossed around but in the end the answer was simple: it had to be a perfect replication of the original otherwise it wouldn't be, well, Jet Set Willy.

So really, how were we to go about recreating such a classic? We started by playing the original. Repeatedly. Obsessively. And we found that nostalgia had glossed over a few things. Dying yet again for the umpteenth time, one after the other until all the lives had been wasted, just didn't make for a good game. Not being able to complete it due to bugs didn't help the cause. Maybe we'd been spoiled by Nintendo for too long. Maybe, just maybe, JSW wasn't that fantastic after all.

If JSW was a classic car how would Lindsay Porter approach it? He'd strip it down, cut out the rust, patch up the panels, slap on a fresh coat of paint, drop in a reconditioned engine and be cruisin'. So we reckoned if we got rid of the more buggier of the bugs, added some modern touches, like saving and resuming a game in progress, splashed around a bit of colour, and made it possible to complete without poking – if we did all of that we'd have a game more accessible to the modern gamer. We'd have a better Willy.

To make the update as faithful as possible the only realistic solution was to port the core of the original Spectrum version and use its data. I'd seen disassemblies on the Net and thought they would be an ideal starting point, but every one I looked at was incomplete, so I dug out my Rodnay Zaks reference book and reacquainted myself with Z80 assembler. A few days and choice profanities later I had a very good idea of how JSW worked. About a week after that I had detailed notes and enough to make a start.

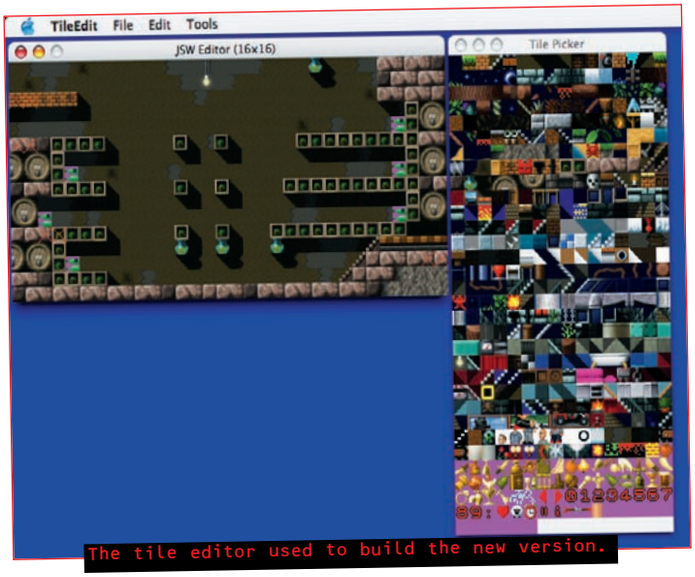
I had an urge at this point to start ripping everything out of the game. Willy's jump annoyed me so that had to go, right? Some of the rooms just didn't make sense. What purpose does Entrance to Hades serve apart from prematurely and unfairly ending the game? The list went on but these niggles had to stay.

Carl developed a mobile version of Manic Miner for Jester, but says he never ever saw if for sale in shops

INK 7:PAPER 0

Whilst I literally spent every waking hour dissecting 20-year-old code, my colleague Paul Vera-Broadbent was getting to know the graphics. We both spent our time repeatedly uttering 'what?!' whilst staring at what looked like the visual equivalent of white noise. Every room, item and baddie was catalogued, sometimes it was a simple task, other times it was just plain impossible.

We decided from the outset that the new look game would simply be that, a new look. Little else would change. Lamb dressed as mutton if you like. Before a single line of game code was written I started on the tools to help create the game: a ripper to pull the room layouts from the original cassette, and a tile editor for piecing together the designs. I had a rough idea of how large the game engine would be, its memory requirements and how much we would have available to use. We hit upon the idea of designing 'full fat' and 'semi-skimmed' versions of each room. Depending on the available memory of the target handset, certain tiles would be automatically converted to have less detail or simply be exchanged for a plain background.



The tile editor used to build the new version.

With Paul now busy on the graphics I was able to concentrate on the guts of the game. I wanted to write something less constrained than the original so we'd have the possibility to create sequels, but not so advanced it would impact the development time. The game engine had to be far more compact than my earlier effort for Manic Miner. In fact everything would need redesigning and totally rewriting. In the finished product, unlike the Spectrum version, not a single line of code was shared between the two.

The game was scheduled to go out in 10 languages, including, and what must be a first, a Tyke translation, on practically every handset available; phones sometimes with little more memory than the computer Willy first appeared on, to others with more than a PC of a few years ago; some with tiny screens, some with huge screens – it all had to be planned for. A few weeks were spent drafting the whole design out on paper until eventually I settled on how I would approach it.

To ensure exact gameplay the updated version still technically views the rooms in much the same way as the Speccy did, with the pretty graphics simply being overlaid, or, for a truly nostalgic child-of-the-80s experience, we even put back in original two-colour blocks. Sprite collision is based on how the original's looked, so when Willy bumps into a baddie he only dies if his 20-year-old self touches his vintage counterpart. All in all it's just like 1984 was here again, only without the big hair and fluorescent socks.

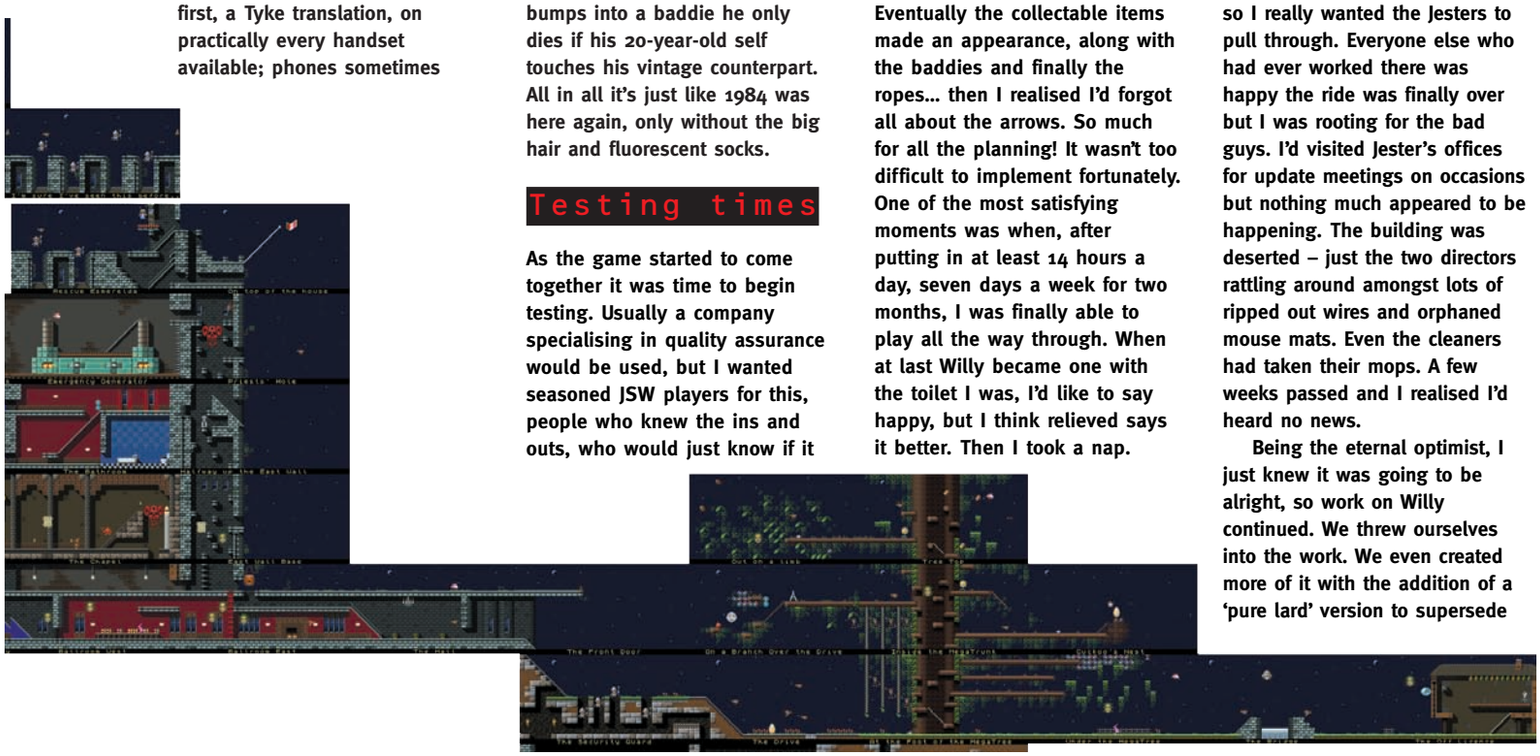
Testing times

As the game started to come together it was time to begin testing. Usually a company specialising in quality assurance would be used, but I wanted seasoned JSW players for this, people who knew the ins and outs, who would just know if it didn't feel right. Jester okayed a public beta using Yahoo Groups and the first builds, with the original graphics, were put to public scrutiny. About 20 people in all volunteered, and over the next few months this dwindled down to two extremely active participants, without who we wouldn't have such an accurate conversion.

The early builds were totally featureless. Willy could walk around an empty mansion and that was that. I guess it must have been very unrewarding for those playing but it was an essential thing to get right. Eventually the collectable items made an appearance, along with the baddies and finally the ropes... then I realised I'd forgot all about the arrows. So much for all the planning! It wasn't too difficult to implement fortunately. One of the most satisfying moments was when, after putting in at least 14 hours a day, seven days a week for two months, I was finally able to play all the way through. When at last Willy became one with the toilet I was, I'd like to say happy, but I think relieved says it better. Then I took a nap.

But then, a rumour started to circulate that Jester had not paid the wages. When I worked there tardy payments were all part of the excitement; the 'win one for the Gipper' speeches around pay day followed by a lame excuse on the day itself, it all added to the Jester Experience. But this was different. A week later and the staff were practically all gone. Remember that little tiny insignificant bit at the start when I mentioned having no contract? Yup, that. I'd spent over four months at this point funding the development myself, paying the wages, buying in hardware, etc., so I really wanted the Jesters to pull through. Everyone else who had ever worked there was happy the ride was finally over but I was rooting for the bad guys. I'd visited Jester's offices for update meetings on occasions but nothing much appeared to be happening. The building was deserted – just the two directors rattling around amongst lots of ripped out wires and orphaned mouse mats. Even the cleaners had taken their mops. A few weeks passed and I realised I'd heard no news.

Being the eternal optimist, I just knew it was going to be alright, so work on Willy continued. We threw ourselves into the work. We even created more of it with the addition of a 'pure lard' version to supersede



>Matt attack!

Matthew Smith at the CGE. He had more than a few choice words for his former business partners

About the time of Classic Gaming Expo UK event we had most of the game complete. Everything was in and working apart from the frontend, so we had the great idea of badgering Matthew Smith himself, a guest speaker at the event, to take a look at the work in progress. The idea was to grab him at the end of his lunchtime talk, but after listening to his thoughts on Willy and copyright, his deal with Jester and the money he never saw from, as he put it, "a gentleman who isn't a gentleman", we decided it would be for the best if we just crept quietly out. The mood of the room had turned black and I think we'd have been lynched!

:Never say die

The same old problem kept cropping up during testing – the 'infinideath'. If there was one thing guaranteed to put players off it was having Willy repeatedly commit suicide. JSW II went some way towards fixing this, but ended up introducing problems of its own. The Amiga port sort of did the right thing but made the game too easy, and one or two different patches to the original version came very close. After a few attempts our final approach was this: for each room we marked out areas where it was safe for Willy to re-spawn, and whenever the player would walk on one of those a snapshot of the game would be taken. Death simply rolled back time, un-collecting items and transporting everything to where it was.

Future JSW games? Perhaps this picture in Willy's house is a clue?

the 'full fat' build, with double-sized rooms and sprites. The game was looking great, much better than we originally had hoped for. The testers were testing, Paul was on with the new graphics and I was pulling it all together.

Ah yes, the 'pure lard' version. I'd never been happy with the tiny 256x128 playing area on the huge smartphone screens; it just seemed a waste of pixels. At Jester I'd experimented with resizing Manic Miner, only then it was to cover-up the fact that early phones were dog-slow and it was quicker to put fewer but larger objects on-screen. Nothing had been redrawn, just scaled up, and customer feedback showed the public disapproved. Oddly, when I reverted back to the smaller size a whole different bunch of people complained! With JSW now having no definite launch date we decided we could take the time required to redraw everything. And since the artwork was going to take a month or so, adding a few extra bits and bobs to the code wouldn't hurt.

With the extra code added we found the game no longer fitted on a few of the target handsets, in some cases we'd swelled over the limit by almost 20Kb, in others it was by a few bytes. Some phones had to be relegated to running a lower version, going from 'full fat' to 'semi-skimmed' for example, with others it was just a matter of rewriting some sections to use fewer lines of code. Going to a lower spec'd version was a hard decision to make: whilst the game still plays the same it's a massive step down in the way it looks.

Happy ending?

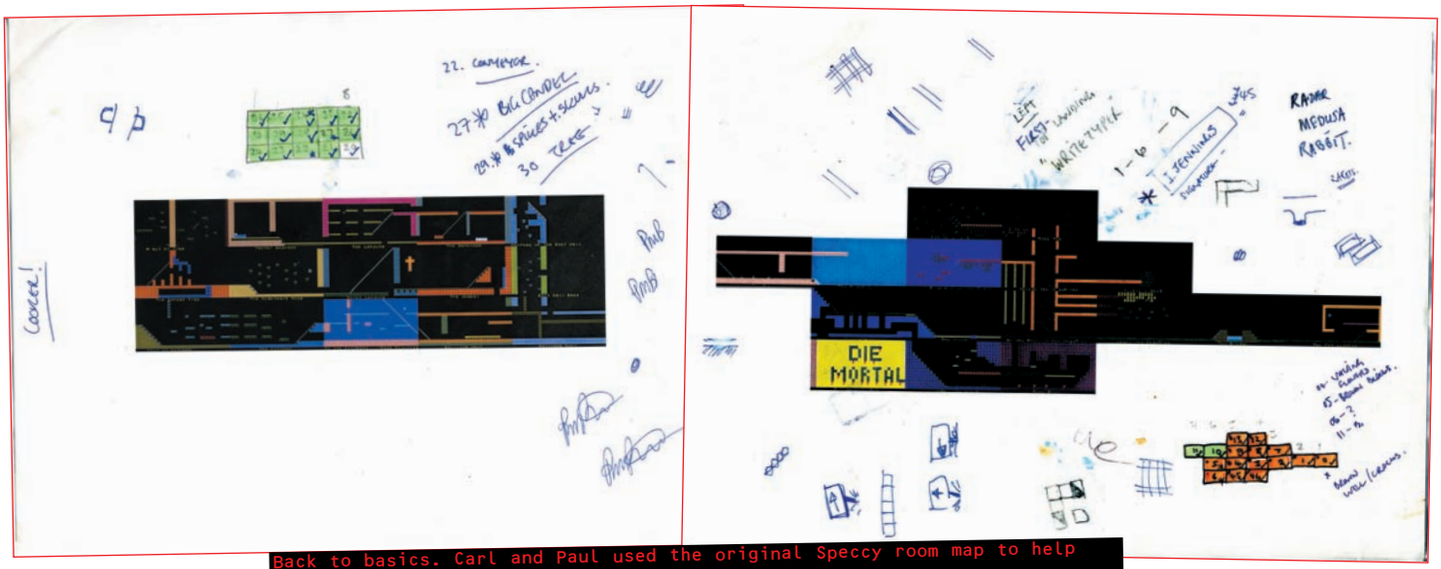
With no news from Jester, work on JSW started to seem a little pointless. It had been six weeks or so since I'd spoken with anyone there so we decided to shelve what we had and get back on with our in-house game projects. Willy was complete on most handsets, the game engine had been thoroughly tested, and the only missing bits were language translations. Releasing our very own Get Set Billy had been thrown around, which we'd no doubt follow up with Paradruid and Iridium.

Two or so weeks after we'd archived everything, still desperate for news of Jester, I noticed the Companies House records had them as in receivership. We were devastated. This spelled the end of Numfum, too, as it meant we wouldn't see any income until our new game was released, which would be at least six months away.

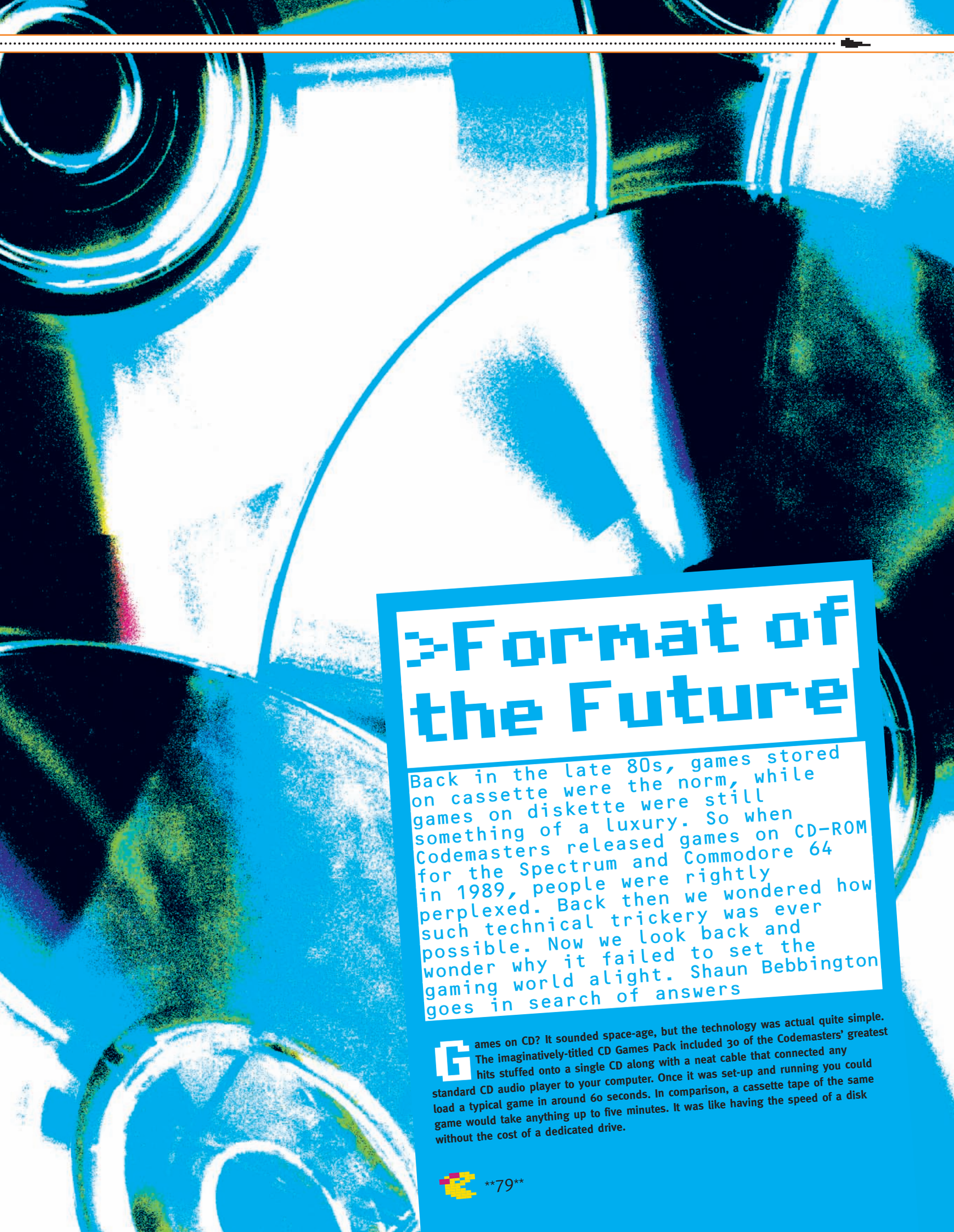
Then, out of the blue, when everything appeared to have quietly slipped away, a journalist from Edge got in touch. I never really understood the hows or the whys, I just answered a few questions and thought nothing of it. A week later, in the December issue, a piece entitled Where's Willy devoted half a page to our situation. On the day of publication a few of the major mobile publishers had already been in touch. After the sedate previous six months things then started to move again.

During all the Jester shenanigans another company, Advanced Mobile Solutions, had been looking to secure the rights to Willy. Late October AMS had signed a deal with the licensees, giving them the rights to JSW on mobile phones. Remember that bit about no contract? Well this time it went in our favour. A week after the Edge article we'd signed the game to AMS.

JSW will be on sale through most of the UK network operators by Christmas, in Europe at the start of next year, and there's talk of porting to the 'standard' used by US phones. We were too late for the seasonal Ho Ho Willy we had on the go, but future Willy games are not out of the question... RG*



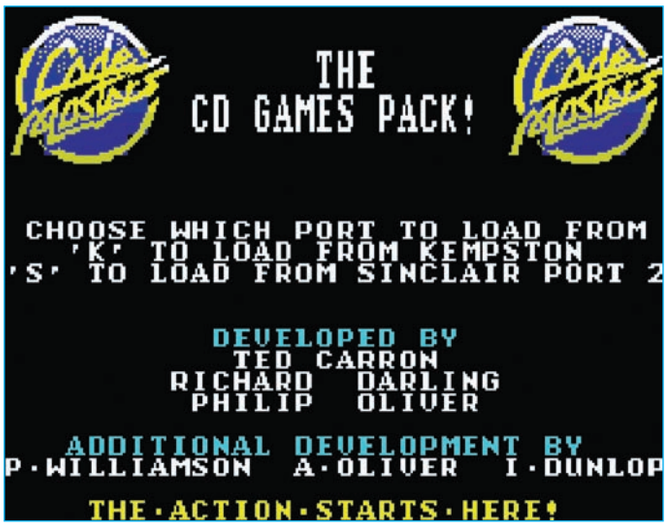
Back to basics. Carl and Paul used the original Speccy room map to help piece together the new version



>Format of the Future

Back in the late 80s, games stored on cassette were the norm, while games on diskette were still something of a luxury. So when Codemasters released games on CD-ROM for the Spectrum and Commodore 64 in 1989, people were rightly perplexed. Back then we wondered how such technical trickery was ever possible. Now we look back and wonder why it failed to set the gaming world alight. Shaun Bebbington goes in search of answers

Games on CD? It sounded space-age, but the technology was actual quite simple. The imaginatively-titled CD Games Pack included 30 of the Codemasters' greatest hits stuffed onto a single CD along with a neat cable that connected any standard CD audio player to your computer. Once it was set-up and running you could load a typical game in around 60 seconds. In comparison, a cassette tape of the same game would take anything up to five minutes. It was like having the speed of a disk without the cost of a dedicated drive.



So how did the futuristic thing work? Well, you simply plugged one end of the cable into your CD player's headphone socket, and the other end into your computer's joystick port. The package also contained a tape which you loaded first. It worked like a driver, pointing the computer in the direction of the CD data steam. The next step was to select the joystick interface type (this wasn't a required step on the C64 as the computer had built-in joystick ports), then set the volume level of your CD player. The first track on the CD was specifically set aside for the purpose of getting the volume right, and you were prompted to gradually increase the volume level until it was *just right* for your equipment. You were then ready to load your first game

There were 30 games on the CD – the cream of Codemasters' budget range – and you selected them as you would a tune on an audio CD – skip forward to your desired track and hit the play button. After a brief pause, and as if by magic, the game would start loading. Thankfully, when you wanted to change the game, there was no need to reset the computer and reload the driver tape. You just held down the keys Q,U,I,T on the Spectrum, or hit the RESTORE button on the C64, and you'd be taken back to the loader screen. Select another game and away you went.

Streaming audio

Streaming audio via the joystick port wasn't a new thing when Codemasters released its CD pack. The idea had actually been used for years to sample speech and short tunes for use in games or demos. Gavin Reaburn, a Codemasters employee who worked on the CD pack, recalls that "The joystick port could report voltage changes when the stick was activated, which is why it could also be used for sampling devices or other devices such as our CD-ROM system."

The innovation was to use the joystick port to load data from CD, and not just to sample audio. In truth, it didn't even have to be CD; the same audio could have been copied to tape or even vinyl if they'd have provided the same high quality digital playback without any background noise. It was the convenience of the way CD players worked, combined with the quality and clarity of the output. Potential storage was also a factor, as you can store roughly 74 minutes of audio on a standard 650Mb CD, so with each game taking around a minute to load, that potentially allowed for over 70 games on a single CD. Codemasters, however, included each game twice, thus halving the storage capability. But this was a wise move as CDs were easily scratched, so including duplicate tracks made sense. And of course you couldn't easily make a backup of the CD at the time. This was seen as a plus point in the fight against playground piracy. "That was definitely an added benefit," says Gavin. "At the time, you could not copy CDs unless you had access to a costly duplication machine."

R CD Loading Error

Prior to release, Codemasters went through a lengthy testing program, but problems quickly arose when the pack was in the hands of the public. For the Spectrum version, on many +2 machines (not +2a or +2b) the volume test didn't work using the built-in Sinclair joystick port, but tended to work with a Kempston interface. Secondly, some of the tracks wouldn't load first or even second time around; even when the volume was set according to the test program you'd still need to tweak it to get it just right. And if you did get the games to load, constantly quitting out of one game and loading another sometimes caused the computer to crash as data was overwritten in memory. Finally, 'dirty' connections would reduce the chances of the process working at all.

Gavin remembers that Codemasters was diligent in the development and testing of the interface and software, but ultimately it came down to cost. "As I recall, it was a challenge getting the system to work cheaply with so many different CD players, especially as the quality varied so much in those days. I can remember everyone lugging in their CD players from home and Codemasters also buying some of the cheapest, nastiest we could find to thoroughly test the system. Getting the data transfer rates and signal levels working well for the analogue to digital converter took some time to get right." And yet there were still problems with the system. It is said that some CD players would work better than others, and the general rule was the simpler, the better. Things like

30 games for £20 – that works out at just 66p a game!

THE CD GAMES PACK
NOW YOU CAN LOAD COMPUTER GAMES FROM YOUR COMPACT DISC PLAYER
ADVANTAGES OF COMPACT DISC GAMES
THE CODEMASTERS CD GAMES PACK INCLUDES
£19·95
SPECTRUM
COMMODORE 64
AMSTRAD CPC
THE ACTION STARTS HERE

The original advert for the pack boasted loading times of as little as 20 seconds per game

bass boost and graphic equalisation would lessen the chances of it working.

The claims that the pack offered "maximum reliability – virtually no load errors" and would work with any "normal CD player" seemed to be stretching the truth, and it's perhaps not surprising that Codemasters never released a second CD collection. In short, the technology was flawed.

Super Cash Flow Simulator

Perhaps it was no great shame though, as Gavin reveals that Codemasters had no grand plans for the CD format. "At the time it was implemented as a way of generating revenue from our back catalogue of games and was not seen as a viable format for individual games. We knew that everyone had a tape deck that they could load games from, but not everyone had access to a CD player, so tapes were still the preferred choice."

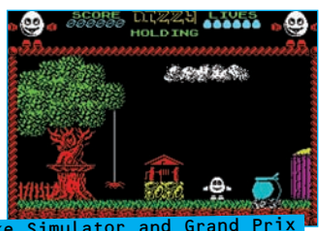
Despite Codemasters looking back rather than forward, Amstrad Action magazine hypothesised a bright future for such a device, saying that Codemasters would "be able to develop whole new styles of games that use the enormous storage capacity of a CD. So can we expect to see a 3,000-screen Dizzy? Or film tie-ins with screen after screen of digitised graphics and full-length soundtracks?" So, were there any plans for bigger and better games? "None were planned that I can remember, although that was always an option," says Gavin. "Bigger games would have taken longer to develop for an already restricted marketplace and the return on investment is unlikely to have made this a viable proposition." Seemingly then, this was a little bit of creative writing and thinking on the part of Amstrad Action. And despite receiving a glowing review from the magazine, the CPC version was never officially released.

We wondered if a similar CD interface was ever planned for the 16-bit machines? "We would have followed the same plan we followed with all of our early inventions, namely to trial the product and then exploit any success, as we did with the Game Genie, NES game cartridges and game cartridges with built in joystick ports." So, a no then, it seems. However, with the relevant programming knowledge you could quite easily use a similar interface on an Amiga 500. It wouldn't have improved the loading times over 3.5in disk, though.

The final word

Before leaving Gavin in peace, we wondered what other prototypes and devices Codemasters still had lying around the offices from the 8-bit era, specifically if the schematics or prototype of the CD interface still existed. "They may be lying around gathering dust somewhere, but they are not consciously kept for any special reason other than where we are legally obliged to do so. Codemasters had a big clearout around five years ago where we skipped and dumped thousands and thousands of our old games and most likely all of our prototypes and home-built dev kits as well." It makes you wonder what else was in development at the time.

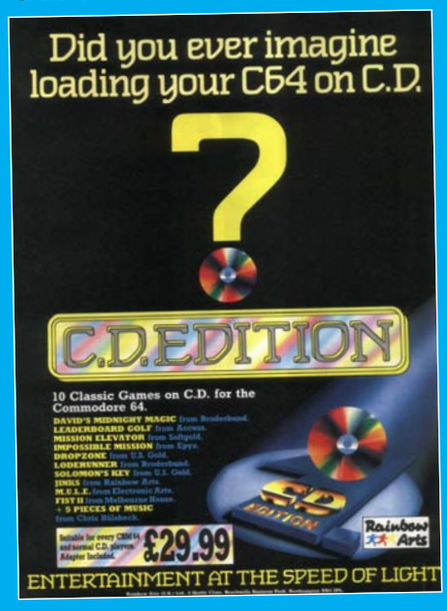
Finally, we asked Gavin why he thought the device wasn't as successful as it could (and perhaps should) have been. "Much like any videogames software today that relies on a certain peripheral to work (e.g. Eyetoy, dance mat and lightgun games) you can only sell those games to the people who have access to that hardware. If you didn't have access to a CD player (and most kids probably didn't in those days) then you weren't going to buy a CD based game. This limited our target audience and is likely to have affected sales." RG*



ATV Simulator, Dizzy, Jet Bike Simulator and Grand Prix Simulator, just four of the games on the compilation. Codemasters certainly liked its simulators!

>Over the rainbow

Codemasters wasn't the only company to try its hand at creating a CD interface for 8-bit home computers. Rainbow Arts also produced a device for the Commodore 64 which worked via the cassette port and loaded discs from any audio CD player with a headphone output. The perceived drawback was that it used the tape port and was therefore tied down to the loading speeds of old. This was not the case though. Because of the higher and clearer output from the CD, it was possible to load the data at faster speeds, with the exception of the first track that acted as a header. It also had compatibility advantages as the computer would assume that a standard tape deck was attached when in fact it wasn't, and so everything would appear normal.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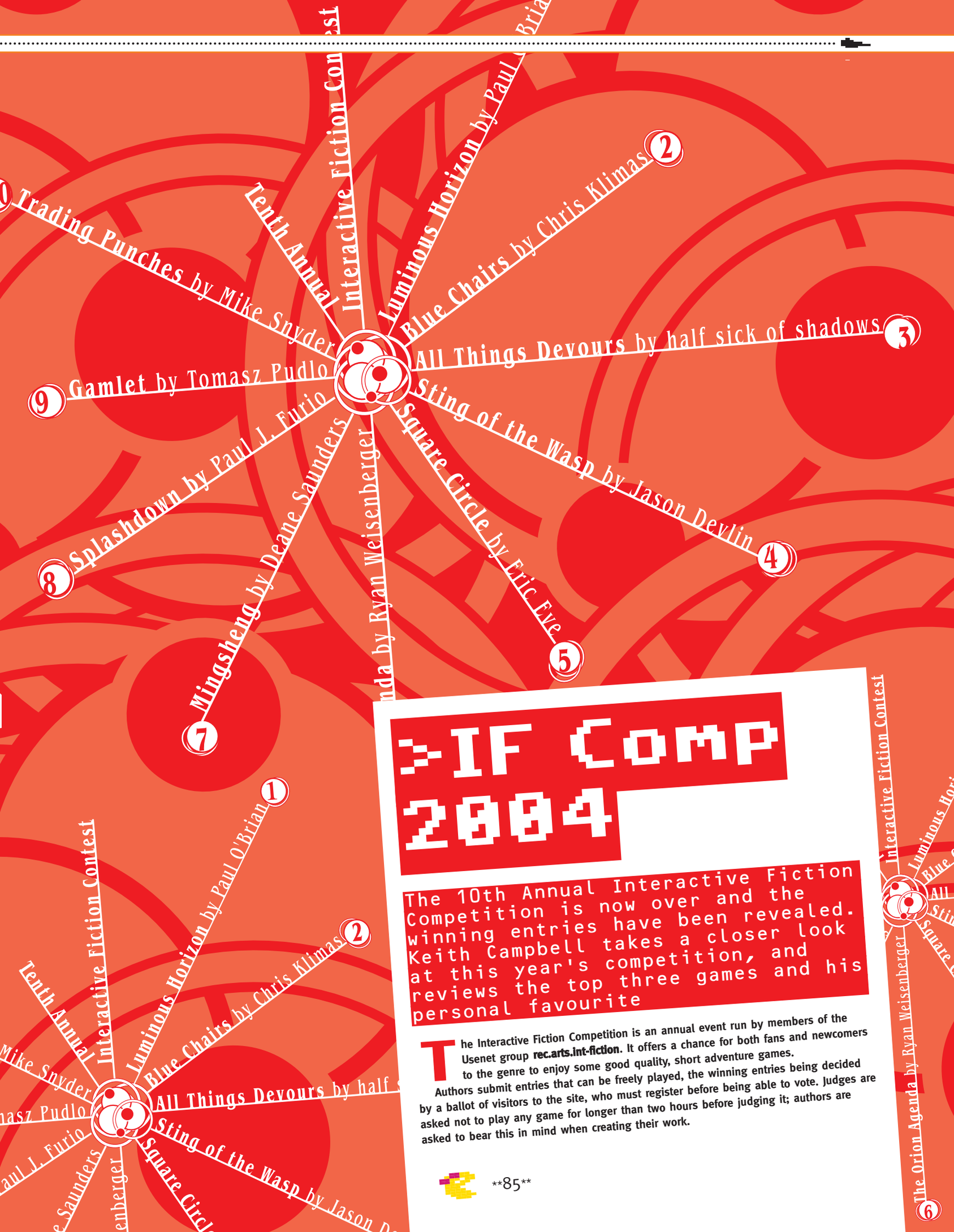
Rainbow Arts
ENTERTAINMENT AT THE SPEED OF LIGHT

Despite the sound technology, the device failed to take off, perhaps because like Codemasters, Rainbow Arts exploited its back catalogue rather than developing new games specifically to show off the advantages of the hardware.

eMag

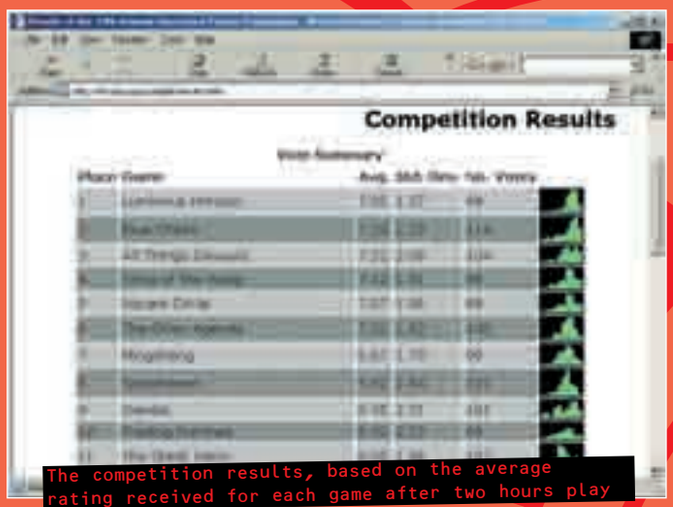

Tenth Annual Interactive Fiction Competition
Luminous Horizon by Paul O'Brian
Blue Chairs by Chris Klimas
All Things Devours by half sick of shadows
Sting of the Wasp by Jason Devlin
Square Circle by Eric Eve
The Orion Agenda by Ryan Weisenberger
Mingsheng by Deane Saunders
Splashdown by Paul J. Furio
Gamlet by Tomasz Pudlo
Trading Punches by Mike Snyder

>IF Comp 2004

The 10th Annual Interactive Fiction Competition is now over and the winning entries have been revealed. Keith Campbell takes a closer look at this year's competition, and reviews the top three games and his personal favourite

The Interactive Fiction Competition is an annual event run by members of the Usenet group **rec.arts.int-fiction**. It offers a chance for both fans and newcomers to the genre to enjoy some good quality, short adventure games.

Authors submit entries that can be freely played, the winning entries being decided by a ballot of visitors to the site, who must register before being able to vote. Judges are asked not to play any game for longer than two hours before judging it; authors are asked to bear this in mind when creating their work.



The competition results, based on the average rating received for each game after two hours play

The entries

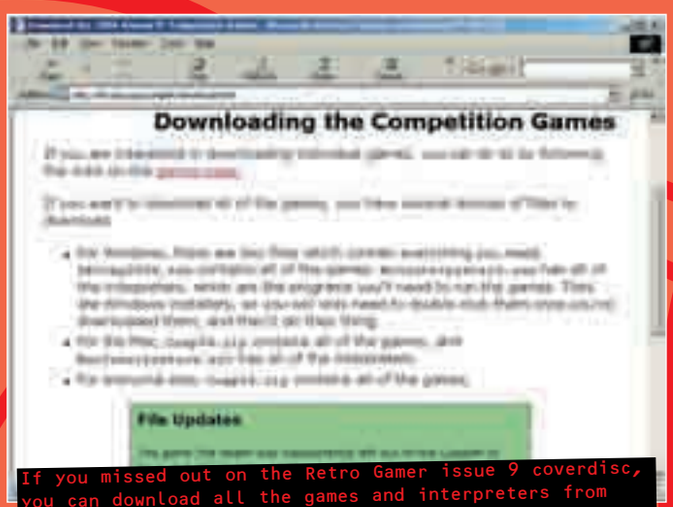
36 games were entered into this year's competition, using between them eight different interpreters. Most popular was the Z-code or Frotz interpreter, which runs Inform format data, with 19 entries based on it. Those familiar with Infocom games will recognise the feel of the Frotz front end, and some of the standard response formats.

Before the results were announced, I played about a dozen or so of the entries to varying depths, although I didn't register as a judge. Some of the games I enjoyed, others left me cold, but I have to say that overall I was very impressed at the high standard.

Interactive fiction is similar to non-interactive fiction, in that however well written, it is a matter of individual taste whether one finds a particular work interesting and entertaining. Thus, my own personal favourite, A Day In The Life Of A Superhero, came 23rd. It just appealed to my sense of humour so much that I wanted to keep on playing it. Again, Splashdown, an excellent Infocom-style adventure, was placed only eight. Reminiscent of Planetfall and Stationfall, it comes complete with sidekick, maintenance robot SPDR-13, known as Spider. Son of Floyd, no doubt.

One or two entries promised to be so frustrating to play that I didn't pursue them to any great depth. In Zero One, for example, you start off locked in a cell with grey walls. 'Examine cell' elicits the reply 'You must supply a noun', whilst 'walls' proves to be an unknown word. 'Nuff said.

There's plenty of variety there, certainly enough to guarantee that you will find at least a handful that you enjoy. All 36 entries, along with the required interpreters, were included on the Retro Gamer issue nine coverdisc. Alternatively, you can freely download them from **www.ifcomp.org**. RG*



If you missed out on the Retro Gamer issue 9 coverdisc, you can download all the games and interpreters from the IFcomp website

>What is IF?

'Interactive Fiction' is a description given to types of computer games more commonly known as text adventures. When micro computers arrived, their memory – typically 16-48Kb – was too small to accommodate early adventures like Colossal Cave and Dungeon, which were restricted to IBM mainframes and DEC minis. Dungeon was eventually split into three parts, adapted to run on a micro from floppy disk, and now famously known as the Zork Trilogy. At the time, even this was available to only the small minority of micro owners who could afford a disk drive. This inspired Scott Adams to create a series of games that were, incredibly in hindsight, memory resident on machines with only 16Kb RAM. The games had plenty of devious puzzles to solve, but the text was necessarily so terse that they could hardly be termed 'Interactive Fiction'.

Micro ownership mushroomed and the technology advanced rapidly during the eighties. Before long, graphics were added to adventures. The term 'text adventure' came into being, used by purists preferring words rather than pictures.

Nowadays, RAM is no constraint for a text adventure, and such games can be as verbose as the author wishes, as well as being memory resident and therefore having a fast response. They can now truly be called 'Interactive Fiction'.

Scott Adams helped popularise the text adventure with his Adventure series of games

>Results

Position	Game	Position	Game
1	Luminous Horizon	19	Typo
2	Blue Chairs	20	Kurusu City
3	All Things Devours	21	Blink
4	Sting of the Wasp	22	Chronicle Play Torn
5	Square Circle	23	A Day in the Life of a Superhero
6	The Orion Agenda	24	Order
7	Mingsheng	25	Who Created That Monster?
8	Splashdown	26	Blue Sky
9	Gamlet	27	The Realm
10	Trading Punches	28	Redeye
11	The Great Xavio	29	Stack Overflow
12	Goose, Egg, Badger	30	Zero
13	The Big Scoop	31	Zero One
14	I Must Play	32	A Light's Tale
15	Identity	33	Getting Back to Sleep
16	Murder at the Aero Club	34	Ruined Robots
17	Bellclap	35	PTBAD 3
18	Magocracy		

Luminous Horizon

Written by: Paul O'Brian // **Interpreter:** Glulx // **Final placing:** First

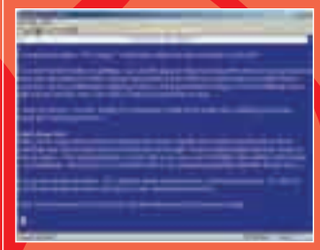
Luminous Horizons is the third part of the Earth and Sky trilogy, but playable as a standalone adventure. An accompanying digital comic, illustrated by J Robinson Wheeler, brings you up to date before you start into Part 3. You play the parts of two superheroes, Austin and Emily, otherwise known as Earth and Sky. They've been transported to a strange alien planet and must search for their abducted parents.

You can swap between the characters to make use of their individual special powers. Austin is colossally strong and invulnerable to impact, whilst Emily can fly, create dense fogs, and throw bolts of electricity. By swapping between the two characters, and asking each other for help and advice, you gain the advantage of their combined powers in pursuit of your goal, whilst all the time you are being watched by the aliens, who try to control your activities.

But beware, like many a good book, this game does take some time to get into. However, it is worth persevering with, as the game doesn't really start until you're through the prologue, which is not obviously a prologue at the time. A worthy winner. Try it and enjoy!

Blue Chairs

Written by: Chris Klimas // **Interpreter:** Z-code (Frotz) // **Final placing:** Second



This is a surreal story, where the player is pitched from one fantasy scenario to another without warning. Finding yourself in an attic above a noisy party, you are offered a bottle of dubious liquid by an equally dubious character, and subsequently start a search for Beatrice, who is desperately calling partygoers on their mobiles, asking for you.

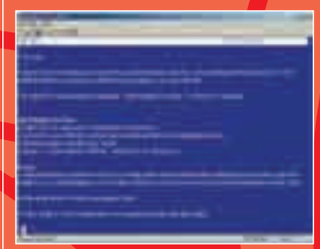
After solving a few fairly orthodox problems to get a lift to Beatrice's place, weird things start happening. Have you really been inaugurated President of the US? What is the meaning of the strangely familiar statues around the White House? Where does the doughnut cabinet in the mini-market lead? And what is it about these blue chairs you come across?

The execution of this game is virtually faultless, give or take an unrecognised word or two. An easily legible white on blue font makes the game easy to play, and there are context sensitive Infocom style 'Invisiclues' built in, to help you through some of the less logical stopping points.

It might be your cup of tea, but it isn't mine. The discontinuity between sections lost my interest in the game before I got very far into it.

All Things Devours

Written by: 'half sick of shadows' // **Interpreter:** Z-code (Frotz) // **Final placing:** Third



Something sinister has been going on. Your research lab has been taken over by the military. You have been thrown out, and when you sneak back into the building you discover they have been working on your prototype machine, a machine that was designed to prove your doubts about the current Quantum Mechanics model. You decide to destroy the prototype before any harm can be done by the release of pure energy.

Be prepared to die frequently! Saving and restoring your position at strategic points takes the frustration out of trying to solve one of the main problems – how to safely destroy the prototype before it destroys the world. You also have to overcome more trivial problems, such as automatic doors that won't open, and lights that fuse when you turn them on.

All Things Devours is an interesting thriller that draws you in. I have to say that I rated it higher than Blue Chairs.

A Day in the Life of a Superhero

Written by: David Whyld // **Interpreter:** Adrift // **Final placing:** Twenty Third

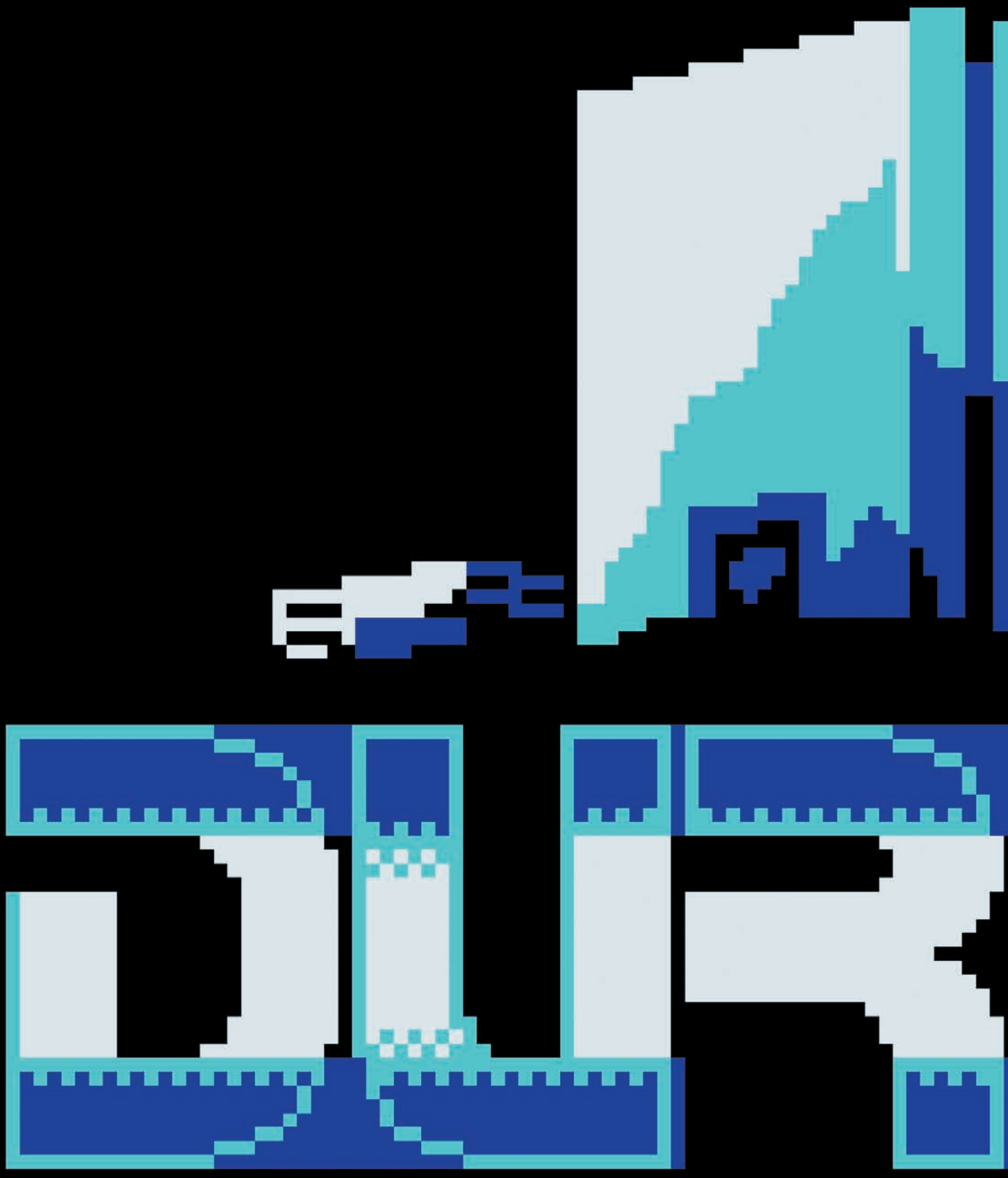
You're The Masked Defender, greatest Superhero the world has known, yet you find yourself hanging from a bridge by your ankles, fifty feet above ground. A crowd gathers to watch, taking bets on whether they can hit you with a pebble. A seagull starts pecking away at the rope...

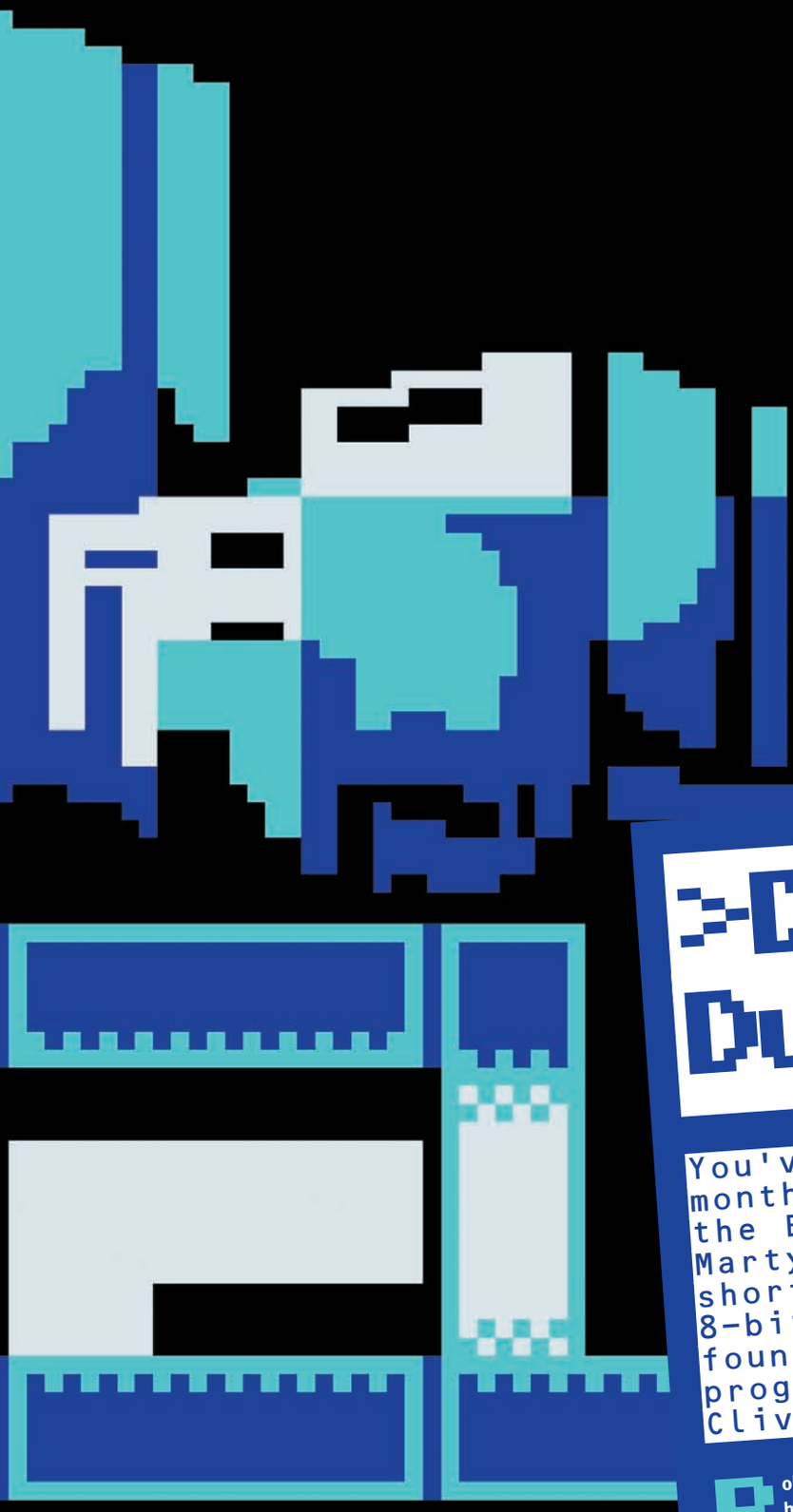
Smelly, your faithful parrot, flies on to the scene. "You're gonna make a dent in that there concrete if you don't do something pdq" he warns. "You know I don't like it when you use abbreviations!" you rebuke him. "Do something about the seagull!"

"That's a Mongolian Killer Seagull, that is," says Smelly. "Vicious swine! Have the head off a horse it would given half the chance. I ain't messing with it!"

When you've worked out how to escape your predicament, you head for your grotty apartment (no telly – had to sell it to buy your Masked Defender costume) with a mission to track down a bunch of Super Villains, The Paper Boys and The Tax Collector.

I found a couple of minor bugs whilst playing, but they were worth putting up with for the rich humour in the text, somewhat reminiscent of Magnetic Scrolls' Jinxter. Try it, as it's guaranteed to bring a smile to your face!


DURELL



>Discovering Durell

You've played the games on this month's coverdisc, but what about the British developer behind them? Martyn Carroll traces Durell's short but successful time in the 8-bit games market, and talks to founder Robert White and lead programmers Mike Richardson and Clive Townsend

Robert White has more to thank his mother-in-law for than most men, as she left him and his wife a house in Taunton, Somerset. The couple immediately moved there from Oxfordshire, and with no rent or mortgage to pay, Robert used the money to set-up Durell Software (the name comes from one of his middle names – Robert James Durell White). This choice of business was not entirely surprising, as he'd been introduced to computers while studying for a degree in Quantity Surveying, and then later in his first job as a CAD specialist working for the Oxford Regional Health Authority.

Clive Townsend, getting grappled by a ninja in a 1986 Crash magazine feature

Despite inheriting the house, Robert was still extremely cautious with cash, and the initial outlay was limited to say the least. "The shared capital was £100," he reveals, "and that was used to buy an Oric computer, a black and white telly, and a few books on machine code. It's still all there on our company balance sheet."

As we catch up with Mike, he's still "very busy" running Durell, although the company left the gaming world behind a long time ago. Durell Solutions, as it's now known, designs database software for the UK insurance industry and has a user-base of around 300 businesses that provide "a nice steady regular income". So from small acorns, or in this case an Oric, the company grew tall and still trades to this day.

Talking of that Oric, Robert went out of his way to get his hands on the computer. "In early 1983 I got one of the very first Oric's that came off the production line. I had been hassling the people at Oric, and actually went along to the factory where they were making them and got one." Given the vast choice of home micros available in 1983, we're somewhat surprised that Robert was so keen on owning an Oric. Was it because it was brand new? "Precisely because it was new. Given that I had zero money – the £100 was a huge outlay – I thought this would be a business opportunity to go and get one of the first machines, literally hot off the press, as I thought there'd be a better market for it."

With the Oric in place, now joined by a new Epson printer, he set about writing software for the new machine. "The first thing I did on it was write a little program called Lunar Landing in BASIC, where the idea was to fill up the program with lots of REM statements, so that people who were novices could see how to write a BASIC game. Then the next thing I did for the Oric was to write a very basic assembler. Just a one-pass assembler, with no macros or anything."

Both programs were advertised in the specialist press and sold via mail order. Sales were steady but significant. "I actually sold a surprisingly large number of both. Even the assembler sold 500 copies, which surprised me because I didn't think there'd be that many people wanting to write assembler code. I actually remember when I got the cardboard box of 500 assemblers, and I put them under the stairs, my wife looked at them and said 'we'll you'll never get rid of them!"

Branching out

As orders continued to drop through the letterbox, Robert realised that the day to day running of Durell was taking up all his time. "What occurred to me while I was doing Lunar Landing and the assembler was that it was impossible to run a business and also write programs. Even doing the mail order stuff – there was everything from getting the labels printed, getting the tapes duplicated and packing them into padded envelopes, to answering the phone and responding to peoples' letters. It was just not possible."

The obvious answer would be to hire a helping hand, someone to deal with the everyday jobs. But there was a more pressing problem, one that could not be solved without specialist staff. "I realised that you could not proceed with any kind of game unless you did them multi-platform. We had to do them on the Oric, the Commodore and the Spectrum at a minimum." Robert needed programmers, so he placed a small advert in a local newspaper. It ran for just one week, and attracted the attention of Mike Richardson and Ron Jeffs.

At the time, Mike Richardson was working as a chemist in an aerosol factory. Programming games was something of a hobby, and he'd already began work on an arcade platform game for the Spectrum. Robert liked his game and hired him on a freelance basis. The game was eventually released as Jungle Trouble, but his first proper job for Durell was far more obscure. "The first game I did for Robert was a Dam Busters game for the Camputer's Lynx," says Mike. "You flew a plane over a dam and dropped a bomb. It bounced along the water..." Like Robert's Lunar Landing, the code was filled with comments and it was sold as a working example of how to create a game in BASIC.

Vertical take off

During its first year, Durell released several successful titles for the Spectrum and Oric, including the aforementioned Jungle Trouble and Ron Jeffs' Scuba Dive. Jungle Trouble was voted game of the month by Crash magazine and Scuba Dive received a 92% review score. Sales were equally positive. "I remember getting quite excited when we had our first big order from WHSmiths for Jungle Trouble which was for about 2,500 copies," remembers Mike. "Then in a few weeks after that we had one for 5,000 copies. Then in a few weeks we had *another* one for 5,000 copies. That seemed like a massive volume to me."

These figures were good, but they paled in comparison to those of Harrier Attack, Durell's earlier bestseller. "Harrier Attack was my idea," says Robert, "and it was a crackingly good idea

A selection of Durell's early releases, written for the Spectrum and Oric computers

Harrier Attack, Durell's best-selling game, shifting over a quarter of a million copies

because basically what all kids wanted to do was take off in a harrier and bomb everything." This was 1983 and the Falkland's War dominated the news, so the timing of Harrier Attack's release was key. The game, a straightforward Scramble clone, was originally written for the Oric by Ron Jeffs, and then Mike Richardson ported it to both the Spectrum and Amstrad in under four weeks.

Robert remembers that there was a hell of a lot riding on the success of Harrier Attack. "Around about September 1983 or so, I placed the advert for Harrier Attack and I remember I actually booked 20 grand's worth of advertising. Again, I had a little conversion with my wife, and said if we didn't sell them we'd have to get rid of the house, because obviously the company didn't have any money. But in fact by Christmas, that game had already sold 40,000 copies." The game was later bundled with the Amstrad CPC and went on to sell over 250,000 copies in total. Everyone was happy, despite reports that some people took objection to the game's scenario given the fact that the country was at war. Neither Robert or Mike recall anything of this though. In fact, Durell even sold some copies to Argentina, where the game was republished as Matador Attack!

Throughout '84 and '85, Durell followed up its earlier hits with a number of critical and commercial successes. After the month Mike Richardson took to port Harrier Attack, he spent the next eight months writing helicopter sim Combat Lynx for the Spectrum. New programmers also joined the company. Simon Francis wrote Critical Mass (inspired by Frank Herbert's Dune) and Julian Todd wrote Fat Worm Blows a Sparky (inspired by God-only-knows what), while Nick Wilson programmed Mineshaft for the BBC Micro.

The release schedule certainly wasn't hectic, and this was mainly because Robert rarely imposed deadlines. "There were no schedules or deadlines or anything like that," remembers Mike, positively. "We were left to own devices really."

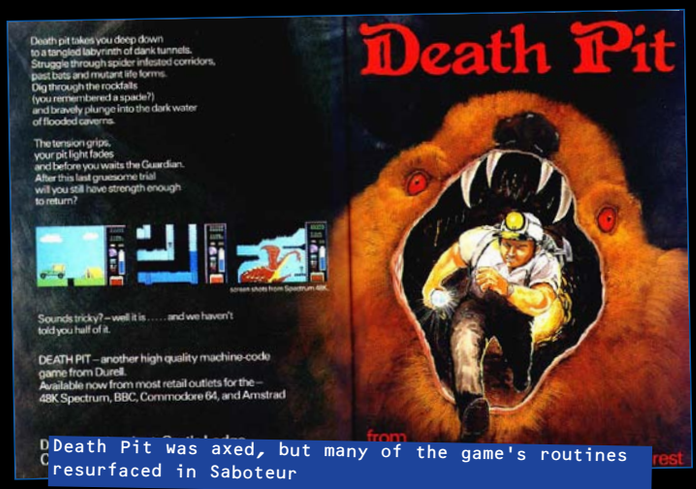
In addition, Robert felt no need to stick his oar in during the design process. "Programmers were given a huge amount of freedom," he reveals. "In the case of someone like Mike, he was just so good that it was pointless to try and tell him what to do. Some of the game concepts, like Thanatos for example, were 100% Mike."

After leaving college, Robert White offered Simon Francis a job and his first title for Durell was the acclaimed Critical Mass

>Come fly with me

The success of Combat Lynx led to an fascinating collaboration with Westland Helicopters

While chatting to Clive Townsend, he revealed that Durell worked on a product for Westland Helicopters, following their earlier collaboration on Combat Lynx. "It was a briefcase containing a Spectrum and a load of microdrives," he explained. "The Westland Helicopters people could visit a client and plug the Speccy into their telly, type in the client's requirements (I'd like to fly from here to here with three people etc) and the program would work out the logistics. It was quite an elaborate program, working out fuel consumed based on the fuel's weight, distance travelled, weight of passengers, life-raft if travelling over water, life jackets, and countless other considerations."


Death Pit
Death pit takes you deep down to a tangled labyrinth of dank tunnels. Struggle through spider infested corridors, past bats and mutant life forms. Dig through the rockfalls (you remembered a spade?) and bravely plunge into the dark water of flooded caverns.
The tension grips, your pit light fades and before you waits the Guardian. After this last gruesome trial will you still have strength enough to return?
Sounds tricky? – well it is . . . . . and we haven't told you half of it.
DEATH PIT – another high quality machine-code game from Durell.
Available now from most retail outlets for the – 48K Spectrum, BBC, Commodore 64, and Amstrad
Death Pit was axed, but many of the game's routines resurfaced in Saboteur

Gun for hire

One of the most notable additions to the team was Clive Townsend. He also lived in Taunton, and began his programming career on a friend's ZX81, creating a simple tarot card program, before buying himself a Spectrum. "As soon as it shipped I created some games and asked a local shop if they would sell them. They said yes, but pointed out that there were other people making games in Taunton too. So I headed for Durell Software."

Clive was originally employed as a graphics artist, but soon found himself programming games. "My first job at Durell was writing Chicken. It was a side-scrolling puzzle-platformer, very similar to some of the Game & Watch games. This was canned in favour of a flip-screen arcade adventure called Death Pit." Death Pit later befell the same fate as Chicken, despite being advertised by Durell. We wondered how far along the game was when the plug was pulled? "Death Pit was actually completely finished and ready for sale," reveals Clive. "All the cassette inserts had been printed and adverts were starting to appear in magazines. Despite this, the game wasn't really up to scratch, so when Robert saw a side-scrolling game I was working on (called Ninja), he asked me to develop that instead. It later became flip-screen and was renamed Saboteur."

Saboteur was released in early 1986 and quickly became one of Durell's best-selling

>Saboteur C16

Many of the Durell ports were done in-house, although there was one noticeable exception – the Commodore 16 version of Saboteur by someone called Barney. "The Amstrad port of Saboteur was done by me," says Clive Townsend, "and the Commodore 64 version used the original graphics. The C16 version was ported externally so I didn't get to see it until it was completed. Just as well too – it looked as if it starred Miner Willy!"

The game's inlay did at least go some way in excusing the shrivelled-up graphics. "Saboteur was originally designed to run on computers with at least 48K of RAM. So to fit it into the C16's smaller memory we have had to make a number of cuts. This version occupies almost every single byte available on the C16 – we are sorry for the cuts, but we believe you will still find it very enjoyable to play."

Thankfully, the dedicated Plus/4 version was much better, an improvement over the C64 original even, with a wider colour palette and faster gameplay.

Spot the difference. The C64 original and the C16 version by 'Barney'

games, shifting 100,000 copies and second only to Harrier Attack in terms of sales. The game was all very James Bond – infiltrate an enemy complex under darkness, grab an important computer disk, plant a bomb and get the hell out – but it just happened to be infinitely better than any of the official 007 licensed games. It was so popular that Saboteur was the only Durell game to earn a sequel, complete with a much bigger map and a varied mission structure. It also featured one of gaming's first female characters – a conscious decision on Clive's part. "I wanted something original, and it seemed quite different to most other games. It's become acceptable now after Tomb Raider, but at the time it was a bit strange. Why shouldn't ninja characters be female? I've met a few lethal ones in my time..."

While Clive was getting to grips with his new leading lady, Mike Richardson was dealing up a double-blow in the shape of Turbo Esprit and Thanatos. Both appeared in '86, but Mike reveals that it was taking longer and longer to finish games. "A lot of effort went into Turbo Esprit as it took me about 10 months to do which was the longest I spent on any game." The time was obviously well spent though, because Turbo Esprit in particular rates as one of the Spectrum's best original games. It's often said that it's the detail that make a title stand out, and Turbo Esprit was absolutely packed with little touches. Within the game's massive 3D cities were working traffic lights, traffic that obeyed these signals, pedestrians crossing the road, little men up ladders...

Thanatos was a unique game too, featuring one of the largest animated sprites ever seen on a Spectrum and some head-spinning scrolling techniques. Both games were written for the Spectrum, before being ported to the C64 and Amstrad, and we asked Robert if the Spectrum was Durell's main platform. "Definitely," he replied, "and that was because Mike was so good. There was no way anybody would give something like Thanatos to Mike as a spec, because quite frankly you wouldn't think it was possible. He would just keep developing things that would make you sit back and go 'wow'."

Business shift

Durell enjoyed a good relationship with the press, with its games very often scoring highly and earning awards. Crash magazine even visited Taunton and ran a feature on the company in its February '86 issue. That feature ended with a look towards Durell's dabblings in business software, but reassured gamers by saying that there was "little danger of the more 'serious' programs taking over".

For a short while that was true. Sigma 7 appeared in Spring '87, Saboteur 2 in the Summer and Chain Reaction at Christmas – three solid releases within a year. But then, at the end of the year, Durell sold its back catalogue of 8-bit titles to Elite Systems and concentrated solely on business software. Robert explains that this shift in focus was not a bolt from the blue. "While we were doing the games, the finances were absolutely mind-blowing. Month by month you could make or lose £80,000 – two bad months in a row and you were in very deep stuff. So almost in the first year I was looking at some way of stabilising it. I thought if we could do some business software that didn't tread on the toes of anything American then that would give us a steady living."

So ultimately it came down to sausages, as Mike explains: "Robert always had this idea of having a sausage machine, where you didn't have to do any work. You simply fed meat into one end and sausages came out the other, and you made money." And that's what good business software could do. Once it was written, it was just a case of keeping it updated and providing profitable after-sales support. It was steadier and far more secure than the volatile games market.

"After we sold off the games", says Robert, wrapping up his side of the story, "I used the money from that to pay wages while Ron Jeffs and I developed the product that we still essentially sell today. It was originally called Insurance Master and is designed for the UK insurance industry."

Saboteur sequels

As the time of the sale to Elite (who resold the Durell games on its Encore budget label), Mike was midway through a Spectrum game called Spitfire. He finished the game for Elite, but was ready to move on. "After Spitfire, I didn't feel like I wanted to work

Clean up the city streets in Turbo Esprit. Watch out as the drug runners have armoured car support!

Thanatos is Mike's personal favourite game. "I like it. I don't know if anybody else ever did?"

Out of interest, Clive traced the female character for the Saboteur 2 loading screen from an 'adult' magazine

with Elite, and Robert suggested I came and worked with him on his database systems. I did that for four or five years, and then Nick Wilson, who also used to work for Durell, came into the office and asked if I'd like to work on an exciting new games project with him."

The project was a version of Games Workshop's Space Hulk for the Panasonic 3DO. The company, Key Game, was later brought by Eidos and renamed Tigon. Under Eidos, Mike worked on two new games – Thunder for the PC, and Saboteur for the PC, PlayStation and Saturn. Saboteur? Any relation to Clive's earlier games? "It was like Saboteur 3," admits Mike." But after working on it for a while we discovered that Clive was also working on a Saboteur 3 for a PC. I'm not quite sure what happened, but I think Eidos bought the name Saboteur off Clive. We had been working on it for about two and a half years, and it was looking really good, when Eidos decided to drop us and moved the work to Pumpkin in Bath. And then about six months later Eidos dropped Pumpkin as well, so it never got published."

We spoke to Clive about his Saboteur sequel, and he told us that the game has been through various incarnations. "After leaving Durell I created Saboteur 3D for the Spectrum, based on the Knight Lore perspective. This was dumped in favour of a flip-screen PC version with digitised sprites. Then this was upgraded to a multi-layer-parallax scrolling version. Unfortunately, due to other work commitments this was never completed. Back in '96 I thought it was time to resurrect Saboteur. After getting permission from Robert White, I set up Bacchus Software Projects and started work. The 3D revolution had hit but 3D hardware was still a rarity, so I started creating a software 3D engine. After working alone for 18 months I finally had everything working; all my maps, models, bitmaps, textures, sound effects... At this point I joined up with two friends – Anatole and Damon Branch – to form Pukka Games. Saboteur 3 was put on hold while we created The Ravaging for Telstar."

Clive's work on the PC version of Saboteur 3 can still be seen on the Web: (**http://easyweb.easynet.co.uk/~bsp**), but we were intrigued to know more about the unreleased Spectrum game. "I think I've got a demo of it in a box under my bed. I'll have a look and get back to you." Sadly, the search turned up nothing, but he promises to continue looking. "It was a technology demo – a ninja who walked around an isometric landscape (like Knight Lore but scrolling). I remember that the outdoor scenes were fractally generated, so bushes and trees were positioned based on pseudo-random data. So no memory spent on map bits other than the buildings."

Events have recently come full circle, with Clive's new company Incognito Games working on a mobile phone version of Saboteur for Elite. He still hopes to release a proper Saboteur sequel one day though. "Saboteur 3 is still waiting to be done. Graphics cards can now duplicate all of the effects used in my software version, such as refraction on water and etched glass, texture morphing, and full-screen anti-aliasing – so the stage is set. It will still happen."

Moving on

Before closing the book on Durell (although we gather a new chapter may soon be written), we asked Robert if he had any regrets about shifting the company away from games software in 1987, especially as the 16-bit era just about to explode. "No, God no," he laughs. "It was very good fun doing the games, certainly the first year or two were brilliant from every aspect, because you could exploit the computers you had to the full all on your own. As the computers got bigger and more complicated they took teams of people to work on. So it just got more and more complicated, and more and more scary from a financial point of view.

"The 16-bit years were technically very interesting, but commercially I can't begin to think how people manage it nowadays. The real death knell, for the small software house at least, seemed to be Sonic the Hedgehog. That came out and it had one trick – woo look the sprite whizzes around – and it was all about big business and selling to the lowest common denominator. And we weren't going to survive in that market. So no regrets, absolutely none. I have no regrets about any of it." RG*

Work in progress screens from Clive's unfinished Saboteur 3 for the PC

If the apes don't get you the crocodiles will!
Our intrepid explorer is forced to leap across rivers on stepping-stones, cut his way through trees, swing over a fire-pit and by-pass a flame-throwing dragon ...
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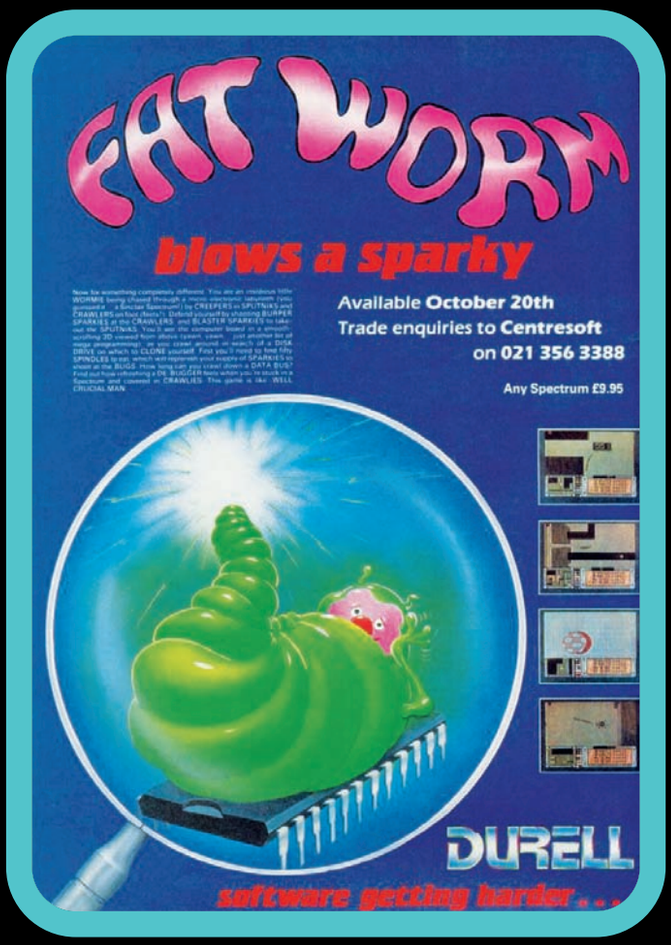
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CHAIN REACTION
Le parti anti-nucléaire a reprogrammé l'équipement robotique de la centrale pour vider la chambre forte et attaquer tout le personnel. Il a dissimulé 18 boites métalliques contenant des cartouches radio-actives extrêmement dangereuses dans les sept étages du bâtiment. Vous avez 30 minutes pour remplir votre mission. Vous disposez d'une mitrailllette perçant les blindages, d'un groupe propulseur et de la meilleure combinaison anti-radiation. Le bâtiment est équipé de douches de décontamination qui pourront vous être utiles, mais il s'agit principalement d'une course contre la montre, contre les radiations intenses et contre les armes robotiques dans un environnement hostile et dangereux qui menace de s'effondrer.
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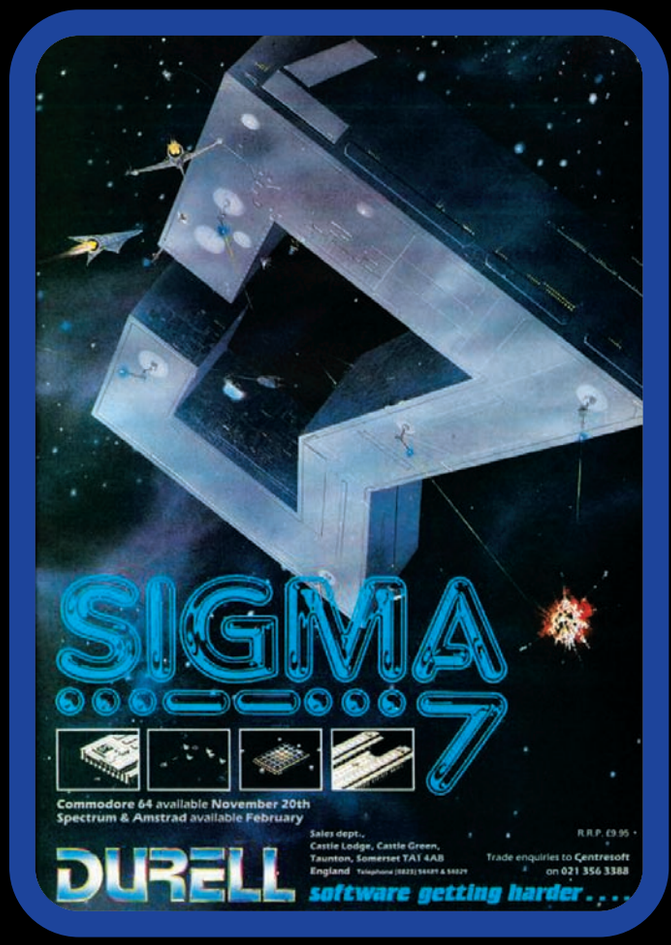
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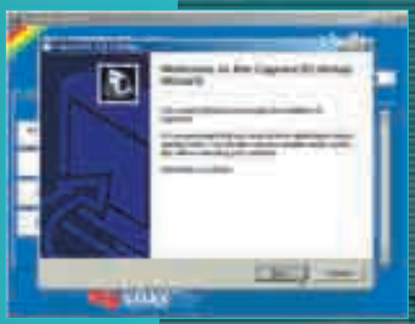
Retro coverdisc

The Retro Gamer issue 11 coverdisc features Durell's Big Hits – over 40 smash-hit games including such classic titles as Saboteur, Turbo Esprit and Thanatos. There's a selection of emulators, so you can play all the games on your home PC or Mac, plus a bonus section featuring video walkthroughs of several Durell titles

step 1 Place the coverdisc into your CD/DVD drive and it should start automatically. If not, select Run from the Start menu and enter D:\browser.exe (assuming that D: is the letter of your CD/DVD drive). When the browser appears, click OK to accept the declaration.

step 2 Select a format using the browser tabs and then click on the Durell Games button. This will open a window containing a directory of all the games for that format. You can either copy the games to your Desktop or open them from the coverdisc.



step 3 You've got the games, but what about the emulators? Some of the emulators install straight from the coverdisc, like Caprice32 or Euphoric. Just follow the on-screen prompts and wait while the files are copied onto your hard drive.

step 4 Many of the emulators are stored in archives, so you may need an archive manager like WinZip to access them. You'll find WinZip under the Utilities tab. Extract all the files from the .zip archive using the Extract feature, then run the executable file.

Problem solving

If you're having a problem with a particular program on our coverdisc, please view the help file in the program for assistance. You might also consider visiting the website of the program author for further help. If this fails, please email: *techsupport@livepublishing.co.uk*.

If you are having problems with the CD, first check that it is not dirty or scratched. CDs can be cleaned by holding them under the cold water tap and gently rubbing the silver side with a tissue. Dry it carefully with another tissue.

If the disc still doesn't work, then it may be faulty. Faulty discs should be returned to Retro Gamer, Live Publishing International Ltd, Europa House, Adlington Park, Macclesfield, Cheshire, UK, SK10 4NP. We will replace all genuinely faulty discs.

Coverdisc helpline

01625 855051

techsupport@livepublishing.co.uk

(Monday-Friday 10am-4pm)

Helpline for coverdisc problems only

DISCLAIMER

Some of the programs on the Retro Gamer disc interact with your PC on a fundamental level. We strongly advise you back up your personal data before using the disc. Due to the way the Retro Gamer disc is compiled, Retro Gamer, Live Publishing International Limited and/or any associated company and/or individual cannot take responsibility for damage to your PC or otherwise arising from use of the coverdisc. You use the programs on the disc at your own risk.

DURELL BIG 40 HITS

The complete Durell back catalogue – dozens of games across seven different formats. Here's what you'll find on the disc...

Chain Reaction

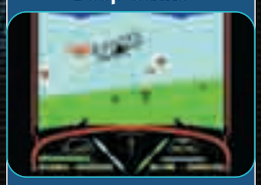
Amstrad, C64, Spectrum

Combat Lynx

Amstrad, BBC, Spectrum

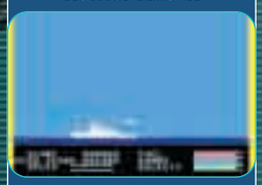
Critical Mass

Amstrad, C64, Spectrum

Deep Strike

Amstrad, C64, Spectrum

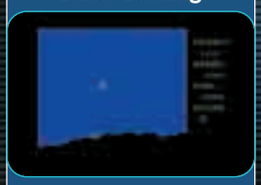
Fat Worm Blows a Sparky

Spectrum

Harrier Attack

Dragon 32, Spectrum

Jungle Trouble

C64, Spectrum

Lunar Landing

Spectrum

Mineshaft

BBC

Operation Hormuz

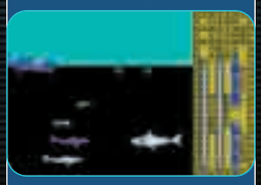
C64

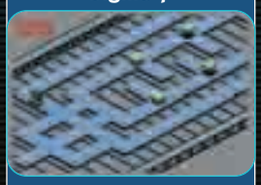
Saboteur

Amstrad, C64, C16, Plus 4, Spectrum

Saboteur 2

Amstrad, C64, Spectrum

Scuba Dive

C64, Oric, Spectrum

Sigma 7

Amstrad, C64, Spectrum

Spitfire

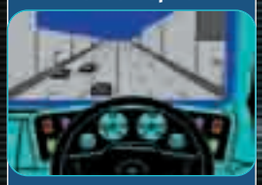
Spectrum

Starfighter

Oric

Thanatos

Amstrad, C64, Spectrum

Turbo Esprit

Amstrad, C64, Spectrum

>Video files

To accompany the Durell games on the coverdisc, we've compiled video footage of four classic titles being played right through to completion. The games are Critical Mass, Saboteur, Thanatos and Turbo Esprit, and it's the Spectrum version in each case. The video is standard AVI format so you'll be able to view it in Windows Media Player or similar (there's no need to mess around with codecs). However, to fit the video files onto the coverdisc, we've had to compress them. As a result, it may be quicker to extract the files to your hard drive and run them from there.

The game walkthroughs have been taken from the RZX Archive (**www.rzxarchive.co.uk**) and videoed using the Spectaculator emulator (**www.spectaculator.com**). Visit the RZX Archive for many more game recordings.

>Mac emulators

The coverdisc is duel format, so Mac users can access the Durell game ROMs. We've also included several of the most popular emulators for each platform, although we regret that we cannot, at present, offer technical help regarding the use of Mac software. If you're experiencing problems, please consult the emulator's documentation or visit the author's homepage (website details are listed in the accompanying text file). Alternatively, post a message on the Retro Gamer forum (**www.retrogamer.net**) – we're sure one of our readers will be able to help. *Please note that all emulators require Mac OS X 10.2 or later.*

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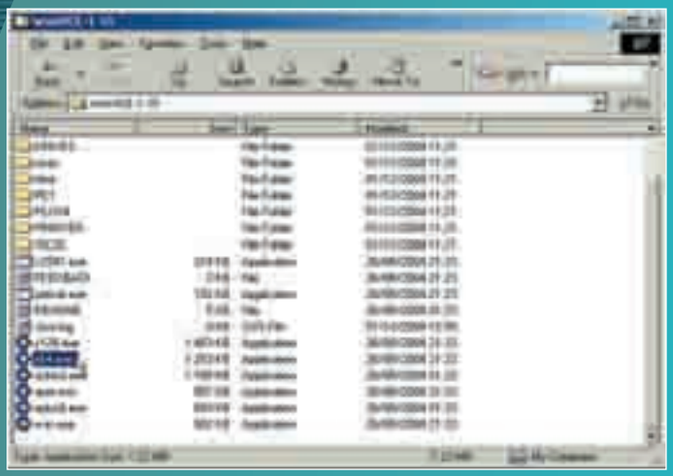
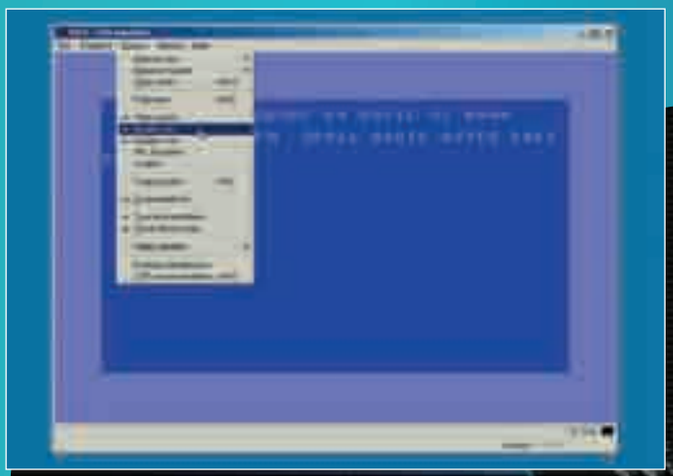
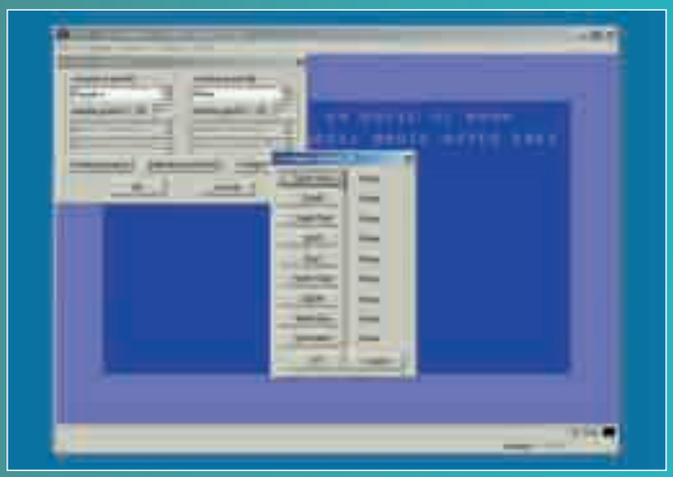
Emulate the Commodore 64 (using WinVICE)



step 1 Unzip the WinVICE archive to an empty folder on your desktop. The folder contains executable files for several Commodore machines. To emulate the Commodore 64, simply double-click x64.exe and wait for the Commodore BASIC screen to appear.



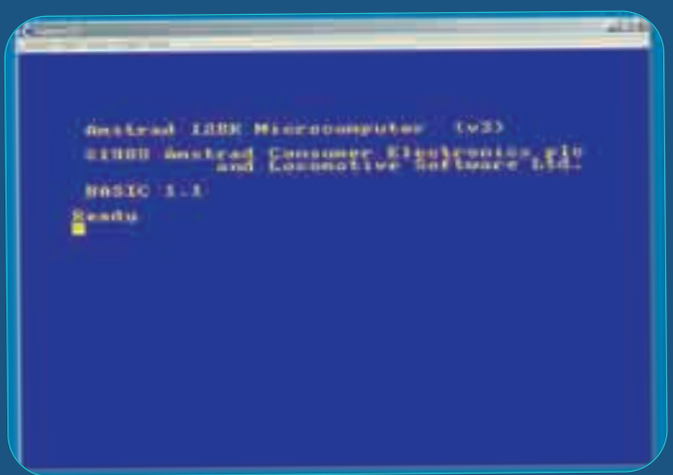
step 2 To run the emulator full-screen, first select Double Size from the Options menu. You can now toggle full-screen mode on and off by pressing Alt+D. To remove the scanlines click Options/ Double Scan. You are now ready to load a game.



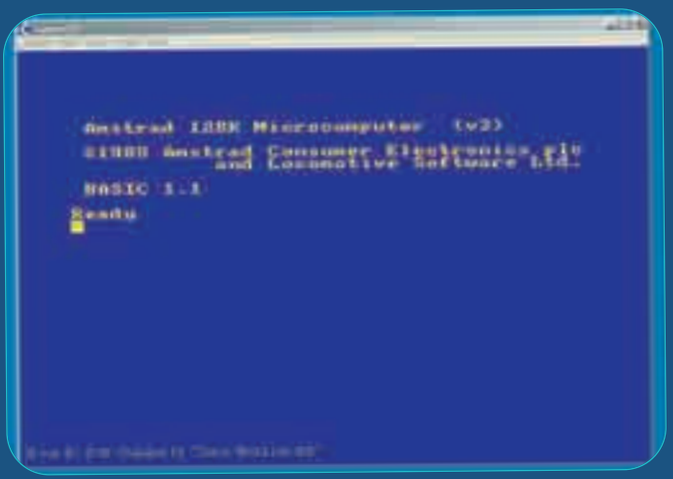
step 3 If you have a PC Joystick then you can use it with WinVICE. Click Settings/ Joystick Setting and select PC Joystick from the drop down menu. You can also emulate an original Commodore joystick using your PC keyboard by selecting Keyset A and then pressing Config Keyset A.

step 4 The games on the coverdisc are a mixture of tape and disk images. To load either type, select Autostart Disk/Tape Image from the File menu and select a game from the Commodore 64 folder. To speed up loading times, toggle Warp on and off by pressing Alt+W.

Emulate the Amstrad (using Caprice32)



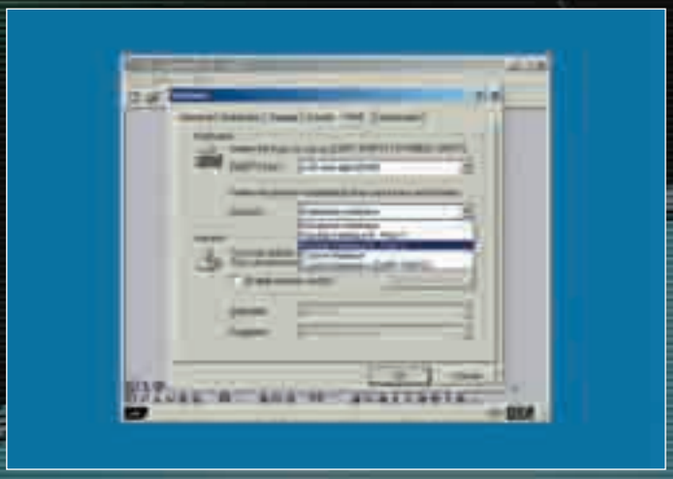
step 1 Install Caprice32 from the coverdisc. For ease of use, select to place shortcuts in the Start menu and on the Desktop. When the files have been copied across to your PC, the familiar Amstrad BASIC screen will be displayed.



step 2 The Amstrad games on the coverdisc are in the .dsk format. To attach a disk to the virtual drive, simply drag and drop the file into the Caprice32 window. A conformation message will be displayed at the bottom of the screen.

Emulate the Spectrum (using ZX32)

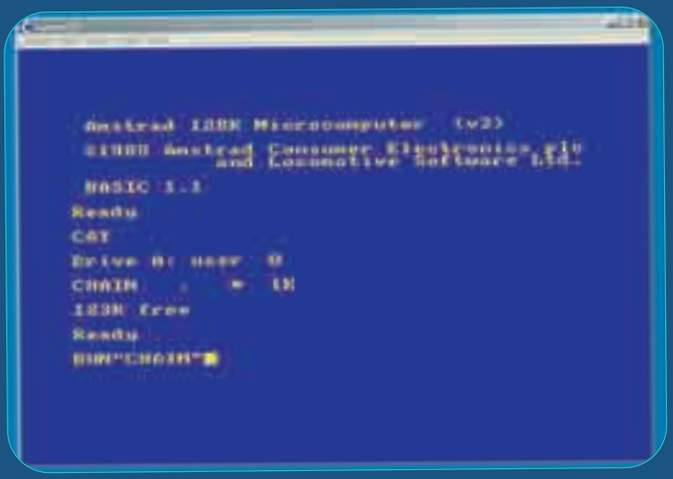
step 1 Run ZX32 from the coverdisc. Press F9, select the Hardware tab and choose a machine from the Default Model menu. Most games will run on the ZX Spectrum +3 but if you have any problems select the ZX Spectrum 48K model. Now click OK and press F5 to reset the emulator.



step 2 Return to the Options dialog (F9) and select the Input tab. Here you can choose which joystick will be emulated using your PC cursor keys (and O to fire). Most Spectrum games support Kempston Interface and Sinclair Interface so select either of these.

step 3 You are now ready to load a program into the emulator. Select Open from the ZX menu and search for Spectrum file types (.z80, .tap and .tzx files are supported by the emulator). Zip files are supported too so there is no need to extract files from archives.

step 4 Click Open to load the game. To toggle between windowed and full screen mode press F4. For a clearer full screen display, you can remove the scan lines by pressing F9 and selecting the Display tab. Now change the Screen Drawing option to Normal.

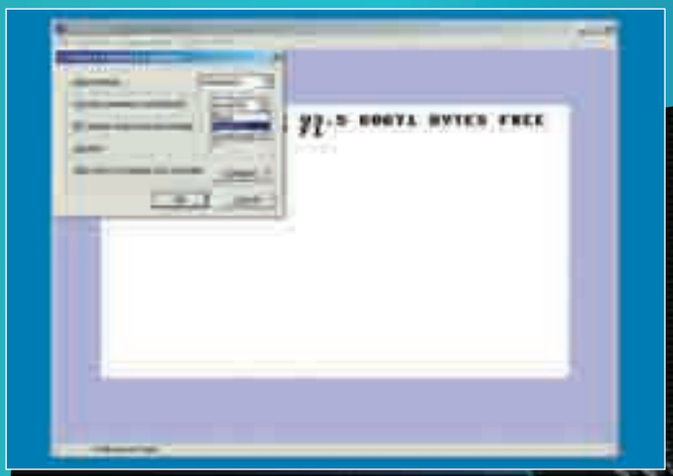


step 3 To run the game, type in CAT and press the Enter key to display the contents of the disk. There may be more than one file listed – you need to run the program file. So, using the example in the screenshot, type in RUN"CHAIN" and press the Enter key.

step 4 The game will now load the virtual disk image. If you would like to speed the emulation up, press F8 and move the CPC Speed slider under the General tab. When you have changed the setting, click OK to return to the game.

Emulate the Commodore 16/Plus4 (using YAPE)

step 1 Extract the YAPE archive into an empty folder on your Desktop and run the yape.exe file. The Commodore BASIC screen will appear. The first thing you'll want to do is increase the size of the emulated screen. Bring down the Screen menu and select the Double Size option.



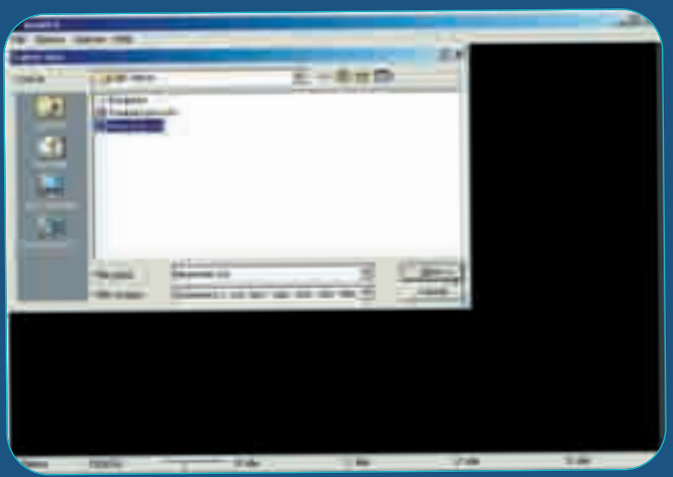
step 2 The next step is to setup the control method. Select Input Setup from the Settings menu and choose to emulate the joystick using either the PC cursor keys or the number pad (both methods use the number pad 0 as the fire button).

step 3 You can load a game. Select Autostart Image from the File menu. Browse to the folder containing the games and select one. As YAPE is a Commodore Plus4 emulator, it will also load Commodore 16 games, so you can play both versions of Saboteur included on the disc.

step 4 Once you have selected a game, YAPE will load it almost instantly. You can reset the emulator at any time by selecting Hard Reset from the Machine menu. You can also save your position in the game by selecting File/ Snapshot/ Save Snapshot As and entering a filename.

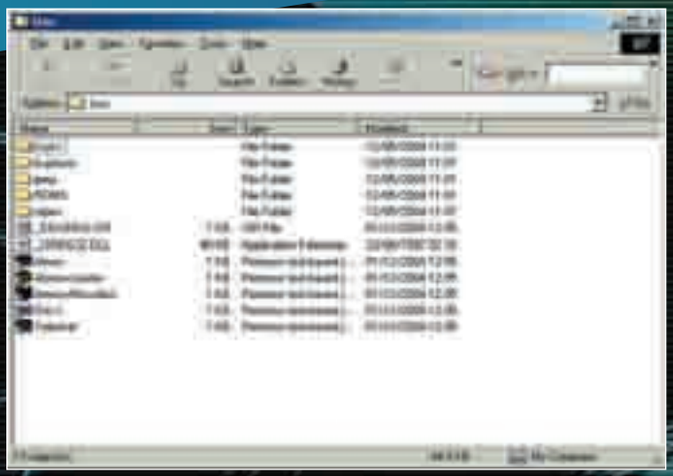
Emulate the BBC Micro (using Model B)

step 1 Unzip the Model B archive to an empty folder on your desktop and run the modelb.exe file. After a brief pause, the BBC BASIC screen will appear. You can manually resize the window or select Options/ Resolution and choose one of the pre - defined resolutions.



step 2 To load a game, click File/ Drive 0/ Load. Now browse to the folder on the coverdisc containing the BBC Micro games and select one. The Model B emulator supports the .ssd files that have been included on the disc.

Emulate the Oric-1 using Euphoric

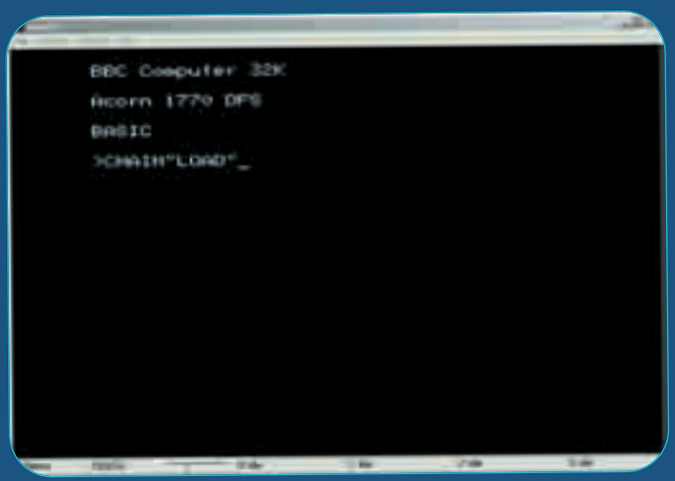


step 1 Unlike many emulators, Euphoric will actually install itself on your PC. Run the setup file and follow the onscreen prompts. When the files have been copied across, you will need to restart your PC. When you're back up and running, select Start/ Programs/ Oric to open a shortcut window.

step 2 By default, Euphoric will associate itself with the .tap file extension, so you can launch any of the games in the Oric folder by simply double-clicking them. After a brief pause, the emulator will open in full screen mode and the game you have selected will be automatically loaded.

step 3 You can easily control games using your PC's keyboard. The cursor keys will control movement, while the Space bar usually acts as the fire button. In Harrier Attack, for example, Space fires rockets while any key on the row above will drop bombs.

step 4 At any time during play you can press F1 to bring up the Environment Screen. Here you can turn sound on and off, increase the Oric-1 clock speed and reset the emulator amongst other things. You can close the Environment Screen by pressing F1 again, and F10 will quit out to Windows.



step 3 Following the example in the screenshot, type CHAIN"LOAD" and press the Enter key to load the game. To view the game in full screen mode, simply select Options/ Full Screen. To return back to windowed mode, right-click anywhere on the screen and again select Options/ Full Screen.

step 4 When in full screen mode you'll notice the authentic scanlines. To remove these, right-click anywhere on the screen and select Options/ Full Screen Scanlines. Choose the Double setting and the scanlines will disappear.

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Commodore 64 SCART cable – 2m, high quality, fits C64, C128, SX-64, VIC-20, Plus/4, etc. £8 + £1 postage. PayPal or Nochex accepted. Phone 07713 630087 or email jp.hayward@virgin.net

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Skies Of Arcadia for the Dreamcast – UK/PAL revision E version. Boxed with instructions and in good condition. £15 + £1 insured postage and packaging. Email garethcrowley@amiga.e7even.com for photo and details

I am selling my private collection of Sega games and consoles – Also many other retro platforms and consoles. Far too many to list. Email me at philip.quickenden@thamesvalley.pnn.police.uk for a full list

Megadrive game Power Rangers The Movie – Box little worse for wear, works fully, Contact Umnicron@yahoo.co.uk for details

For sale! – The original Sonic game cartridge only and Sonic II boxed with instructions for the Megadrive console. Please email about price and information patrickmc_court@hotmail.com

Megadrive UK system for sale – Comes with cables, controller and boxed games. The machine itself is unboxed but has some baggies. All in good condition. £15 + £6.99 insured P&P. Email garethcrowley@amiga.e7even.com for photo/details

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Spectrum and C64 games for sale – Please email me for a list at mcampion65@yahoo.com

Job lot of computer books – Various formats, such as Oric, C64 and Sinclair. Will split for around £1 each. Postage and Packaging at Royal Mail cost. Email me for photos and details at garethcrowley@amiga.e7even.com

Job lot of Windows and IBM PC games – Mostly UK versions. Most are boxed with instructions and on CD. Will split at around £1 each. Postage and Packaging at Royal Mail cost. E-mail garethcrowley@amiga.e7even.com for photos and details

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Hello, I'm looking for some members for my Internet forums at www.ingomania.co.uk – Talk about anything retro! (NES Classics layout coming soon, and extended retro zone)!

Dreamcast news and reviews – Past and present (including new imports), with open discussion forums. Check out http://www.dreamcast-lives.tk

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eMag

Back in the day

When the pixel was king

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RETRO GAMER

Endgame

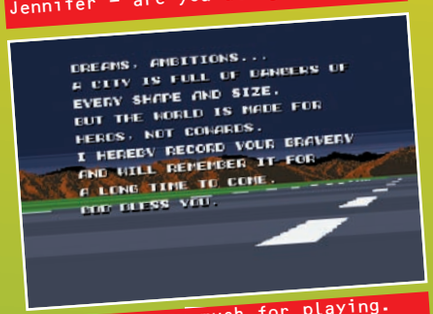
This month it's the explosive conclusion to Special Criminal Investigation (Chase H.Q. II), in which our sharp-dressed heroes have just 30 seconds to rescue the mayor's daughter from a warehouse before it explodes...

There's only seconds left. Hit the turbo button and hold onto your hat!

The car screeches to a halt outside the factory with a single second to spare

But that's plenty of time to get Jennifer out before the roof blows off

The mayor hugs his daughter. "Oh Jennifer – are you alright, baby?"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BUT THE WORLD IS MADE FOR
HEROS, NOT COWARDS.
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AND WILL REMEMBER IT FOR
A LONG TIME TO COME.
GOD BLESS YOU.

Thank you very much for playing. Good night and God bless!